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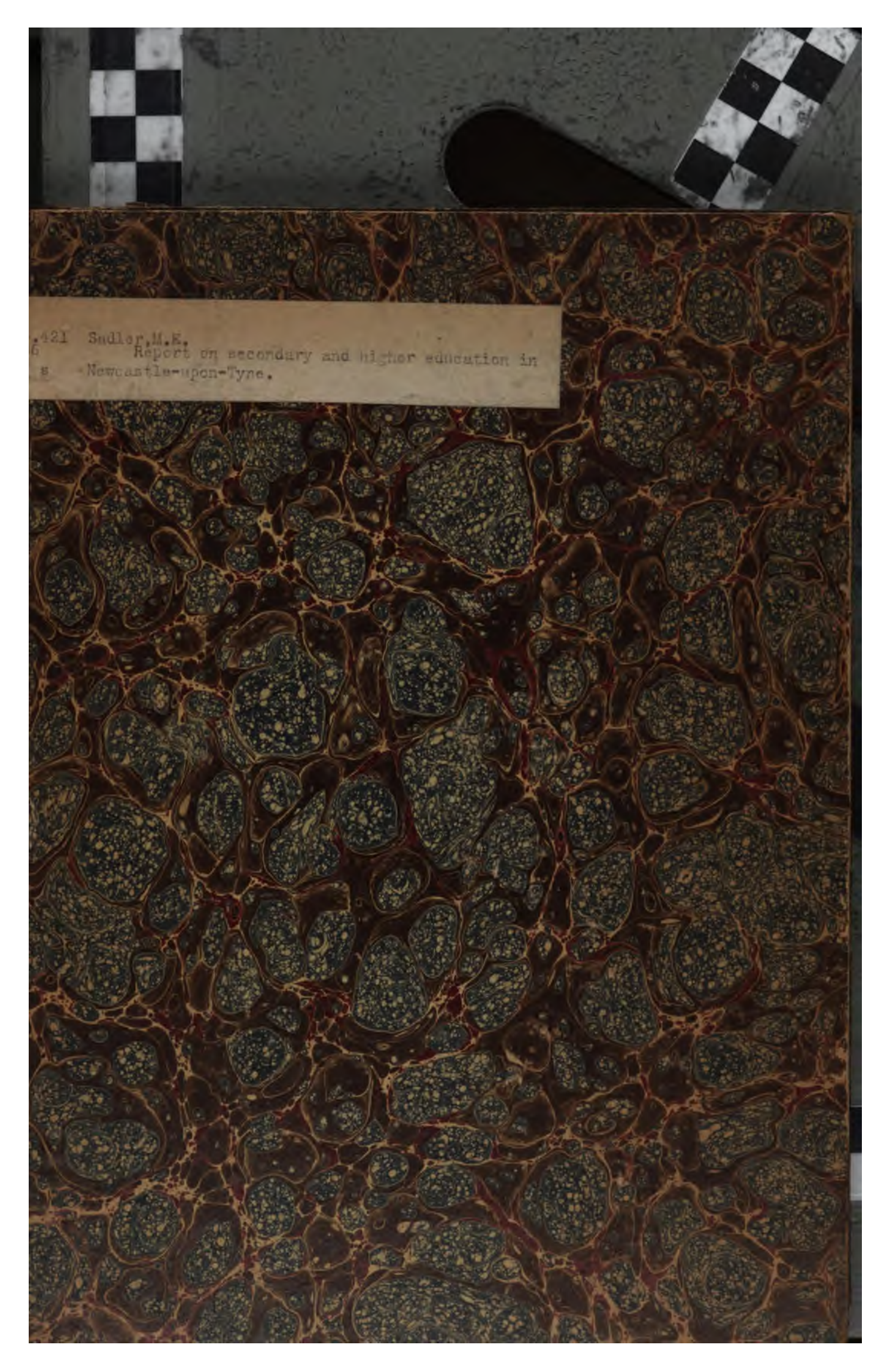
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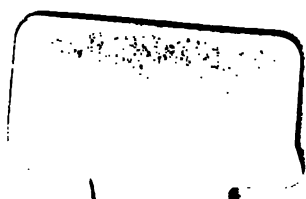
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The image shows the front cover of an old book. The cover is decorated with a traditional marbled paper pattern, featuring large, irregular, dark green or black 'stone' shapes separated by a network of thin, reddish-brown veins. A rectangular piece of off-white paper is pasted onto the upper left portion of the cover. On this paper, there is a library call number and a title. At the very top of the image, a portion of a black and white checkered ruler is visible, used for scale.

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6 Report on secondary and higher education in
s Newcastle-upon-Tyne.



City and County of Newcastle-upon-Tyne.

EDUCATION COMMITTEE.



REPORT

ON

SECONDARY AND HIGHER EDUCATION

IN

NEWCASTLE-UPON-TYNE,

BY

MICHAEL E. SADLER,

M.A., Oxon. Hon. LL.D., Columbia.

Professor of the History and Administration of Education in the
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CHARLES & JOSEPH HODGKINSON.

FROM ONE HUNDRED.



Basement

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CHAPTER I.

INTRODUCTORY NOTE.

The following report is the outcome of an inquiry made by me in the course of 1904 on behalf of the Education Committee of the City and County of Newcastle-upon-Tyne. The Committee charged me with the duty of inquiring into the present condition of Secondary and Higher Education in the City and of gauging its future requirements.

Newcastle is the educational metropolis of a wide and, in part, a densely populated area. Its own population of nearly a quarter of a million inhabitants is but a portion of a much greater multitude which looks to it as the intellectual centre of a wide region. In studying therefore the educational organisation of the City, it was my duty to remember what may be called its territorial, as well as its purely civic, scope.

No one can study the educational system of the City and fail to be impressed by certain characteristics which give it distinction and force. The concentrated attention and vigour of purpose displayed by the engineering apprentices in many of the evening schools, are amongst the most striking things that English education has to show. And the visitor is often impressed in many other quarters by the native excellence of the material upon which the schools have to work. The varied industries and activities of Tyneside, the opportunities of access to foreign parts, the ancient and tough tradition of the City, the love of craftsmanship and of discussion and of natural history, have all had their different influence upon the educational resources of the place.† There is

† Passing mention may be made here of a number of educational institutions not elsewhere referred to in this report,—the Literary and Philosophical Society, which has an intellectual record of high distinction; the admirably directed Public Library, with its Bewick collection and Gibsone's drawings of shells; the excellent Hancock Museum of the Natural History Society; and (if one may include it, as it deservedly should be included among the educational agencies of the city) the park in Jesmond Dene.

much individuality of effort, much directness of purpose ; but with these things there is a lack of linkage in the system, and is there not also at times a half-contempt for subjects which at first sight look unpractical or detached from the work-a-day duties of life ? There are indeed on all hands encouraging signs of educational advance, but there also remains here and there a certain indifference to school training, as if it were true that what a boy learns at school made little difference to him afterwards in practical affairs. But the longer my stay in Newcastle, the more conscious did I become of the strength of the current of educational conviction which is now making itself felt there as it is in every progressive district in England, and which is the outcome of a deep sense of national opportunity and also of national need.

Yet is there not a danger lest, as has happened more than once before in our educational history, we should attach too little importance to the Humanities in education and too much importance to what is material and apparently capable of yielding direct profit ? "There is much dispute," Mark Pattison wrote, "as to what should be taught in the middle schools. Let the answer be *that which humanizes*. The aim of the school is not the storing of the memory with knowledge. That, and that only is education which moulds, forms, modifies the soul and mind. Nothing educates which does not raise the mental powers to a red heat ; it is more efficacious still if it can raise them to a white heat, and still more if it can fuse them. We should aim at raising all the powers, bodily and mental, to this full state of health and vigour, and directing them to worthy objects. The teacher endeavours to liberate the ideal human being which is concealed in every child."

In carrying out the task which the Committee entrusted to me, I received valuable assistance from several of its members, especially from Alderman Sutton (Chairman of the Education Committee), Mr. Lunn (Vice-Chairman of the Education Committee), Dr. Spence Watson (Chairman of the Higher Education Committee), to whose kindness I am particularly indebted, Canon Lister, the late Principal Gurney (whose lamented death took place shortly after the completion of the first part of my inquiry), Sir Isambard Owen, Dr. Ethel Williams and Miss Moberly. I desire also to thank for their help the Town Clerk (Mr. Hill Motum), Mr. Goddard, Secretary to the Education Committee, Colonel Blake, the Chairman of the Education Committee of the Northumberland County Council, and Mr. Charles Williams, its Secretary. Among the members of the

Education Committee's staff who gave me special assistance, I should name Mr. Breakwell and Mr. Richardson, together with Mr. Gaunt, the Head of the Pupil Teacher Centre, and the Headmasters of many of the Public Elementary Schools. The Headmasters and Headmistresses of the various Secondary Schools, public and private, into the work of which it was my special duty to inquire, received me with uniform courtesy and supplied me with all necessary information. From His Majesty's Inspectors, Mr. E. G. A. Holmes and Mr. Hugh Gordon I received guidance which helped me much. In the course of the inquiry I had the assistance of Mr. J. L. Holland (now Secretary for Education to the Northamptonshire County Council), Professor Foster Watson (of the University College of Wales, Aberystwyth), and Miss M. S. Beard, and desire to express to them my thanks for the help which they have given me.



CHAPTER II.

STATISTICAL SURVEY OF SECONDARY EDUCATION IN NEWCASTLE-UPON-TYNE, 1904.

The City and County of Newcastle-upon-Tyne contained in 1901 a population of 215,328. The total number of boys and girls in *public and private* secondary schools in the City, in the summer term 1904, was 2,730, or **12·67** per 1,000 of the population. Of these, 1,463 (or 6·79 per 1,000 of the population) were boys, and 1,267 (or 5·88 per 1,000 of the population) were girls. Girls formed 46·4 per cent. of the total number of pupils receiving secondary education.

The total number of pupils in *public* secondary schools was 1,820 (1,038 boys and 782 girls), or 8·45 per 1,000 of the population. The total number of pupils in *private* secondary schools was 910 (425 boys and 485 girls), or 4·22 per 1,000 of the population.

The pupils in private schools were 33·3 per cent. of the total number of those receiving secondary education. In the *private* secondary schools the girls were 53·3 per cent. of the total number of pupils. In the *public* secondary schools they formed 42·96 per cent.

Only a very small proportion of the pupils in secondary schools in Newcastle are boarders (3·15 per cent. in the summer term 1904), but a considerable number come in daily from outside the City boundaries. In the autumn term 1903 there were in the schools as

* The produce of a rate of one penny in the pound for purposes of Higher Education is £6,500. The residue under Section 1 of the Local Taxation (Customs and Excise) Act, 1890, applicable to purposes of Higher Education in the City amounted in the year ending March 31, 1905, to £4,392.

many as 869 pupils (520 boys and 349 girls) whose homes were outside the precincts of the City. These numbers include, however, children residing in Benwell and Walker, both of which districts have since been included within the City. It is not possible to state with precision how many children came from Benwell and Walker, but the number may be roughly estimated at 100.

The most important of the above statistics are summarised in the following table:—

NUMBER OF BOYS AND GIRLS PER 1,000 OF POPULATION IN
PUBLIC AND PRIVATE SECONDARY SCHOOLS IN
NEWCASTLE-UPON-TYNE.

TYPE OF SCHOOL.	No. of Boys.	No. of Girls.	Totals, Boys and Girls.	No. of Boys and Girls per 1,000 of Population.
Public Secondary.....	1038	782	1820	8.45
Private Secondary	425	485	910	4.22
Grand Totals.....	1,463	1,267	2,730	12.67

The public secondary schools in the city fall into two main categories, viz.: (1) Higher Secondary Schools; (2) Middle Secondary Schools, including one Co-educational Middle Secondary School.

The first group consists of three schools—the Royal Grammar School, the Central Newcastle High School for Girls (Girls' Public Day School Co.), and the Newcastle High School for Girls (Church Schools Company). These contained, at the time of my visit, 586 pupils—287 boys and 299 girls.

The second group consists of six schools—Allan's Endowed School for Boys, Allan's Endowed School for Girls, St. Cuthbert's Grammar School for Boys, St. Anne's Secondary School for Girls, and the Rutherford College Co-educational Secondary Day School.* In these schools there were 1,234 pupils—751 boys and 483 girls,

* The Elswick Institute Day Classes, though virtually constituting a secondary day school of a public character, are for the purposes of these statistics, placed in a special category under the head of private secondary schools, in view of the fact that the premises belong to the Elswick Works (Sir W. G. Armstrong, Whitworth, & Co.), and that the institution is supported by subscriptions from the workmen and the firm.

of whom Rutherford College Secondary Day School contained 638 pupils—401 boys and 237 girls.

Diagrams I., II., and III. show, in graphic form :—

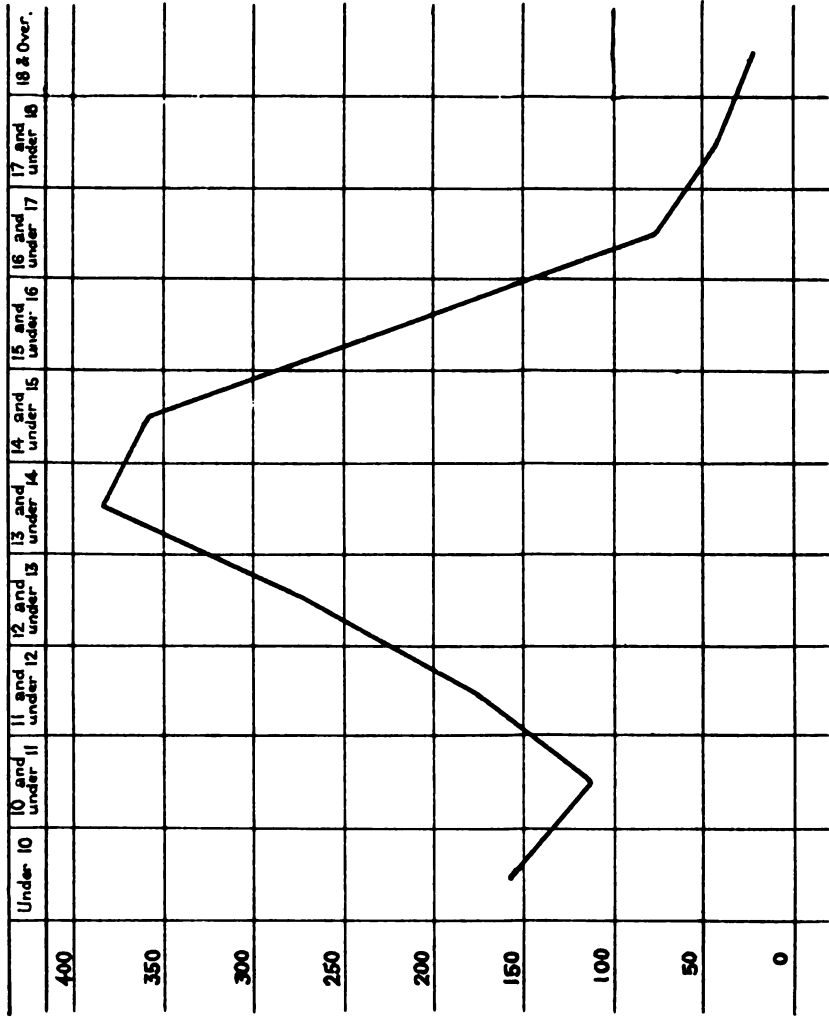
- (I.) The number and ages of pupils (boys or girls) in public secondary schools in Newcastle, in the summer term, 1904.
- (II.) The number and ages of pupils in public secondary schools for boys in Newcastle, in the summer term, 1904.
- (III.) The number and ages of pupils in public secondary schools for girls in Newcastle, in the summer term, 1904.

A course of secondary education should cover at least the four years from twelve to sixteen. With no shorter period can a secondary school accomplish its appointed intellectual work, and it is highly desirable that instead of ending at sixteen, even the middle secondary school course should be prolonged to seventeen years of age. It will be observed, however, from the following diagrams, how rapidly the numbers in the secondary schools in Newcastle-upon-Tyne fall away after the pupils have reached their fifteenth birthday. The diagrams indicate a source of weakness in the secondary education of the City, but it should be added that a similar defect is found in secondary education in other parts of England.†

In carrying out the instructions of the Committee, I inquired into the part borne by private schools in the provision of secondary education in the City. Forms asking for detailed information as to the number and ages of the pupils, particulars of the teaching staff, the examinations for which the pupils are entered, etc., were sent to the private schools, and replies were received from twenty-seven. Nineteen of these schools were visited during the course of my inquiry. Six out of the twenty-seven schools from which information was received, proved to be doing work of an elementary character, and to be virtually alternative to the public elementary schools. They contained 150 pupils, 56 boys and 94 girls. These

† The Board of Education defines a secondary school as "a Day or Boarding School, which offers to each of its scholars, up to and beyond the age of 16, a general education, physical, mental and moral, given through a complete graded course of instruction, of wider scope and more advanced degree than that given in Elementary Schools."

Diagram I.
Number & Ages of Pupils (Boys & Girls) in Public Secondary Schools, in Newcastle-upon-Tyne, Summer Term, 1904.



1

Diagram II.

Number and Ages of Pupils in Public Secondary Schools for Boys in Newcastle-upon-Tyne, Summer Term, 1904.

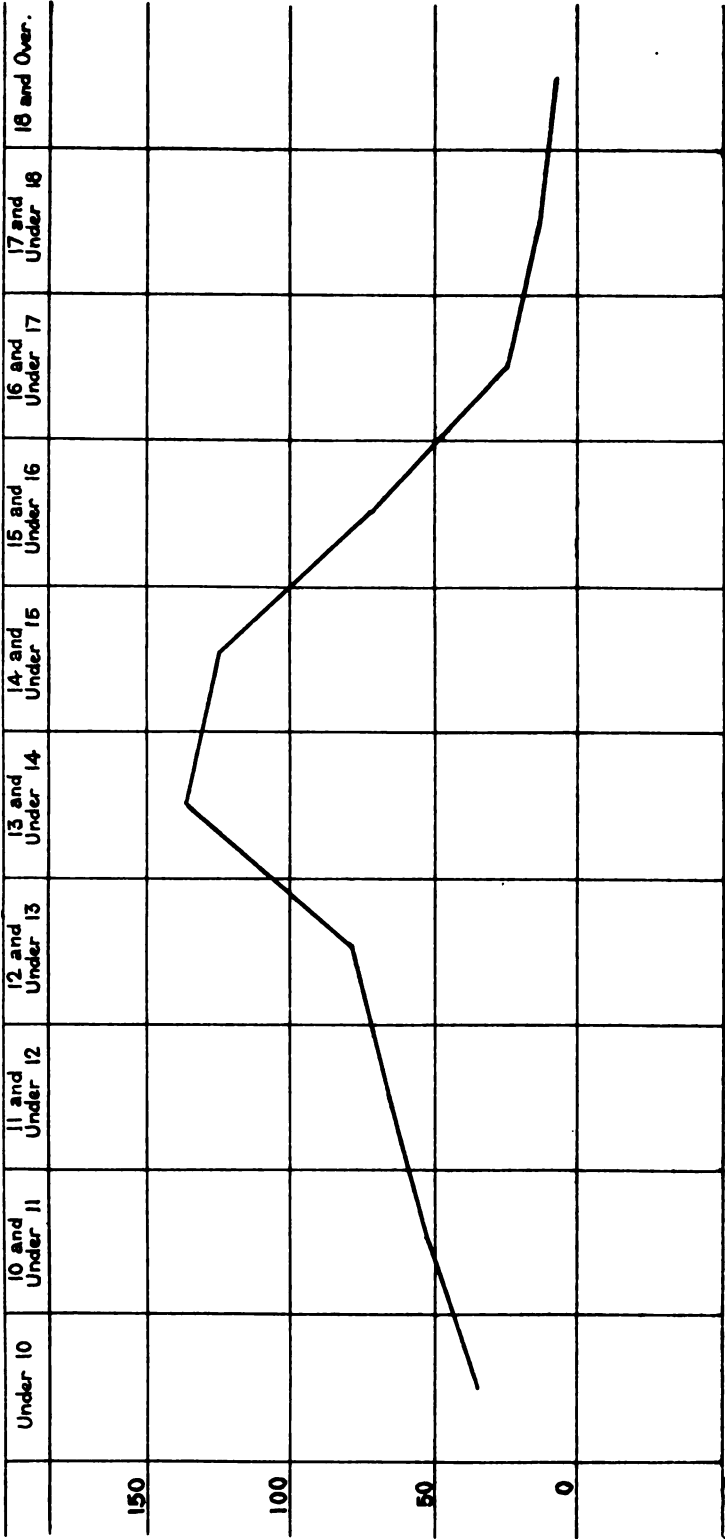




Diagram III.
Number and Ages of Pupils in Public Secondary Schools for Girls in Newcastle-upon-Tyne, Summer Term. 1904.

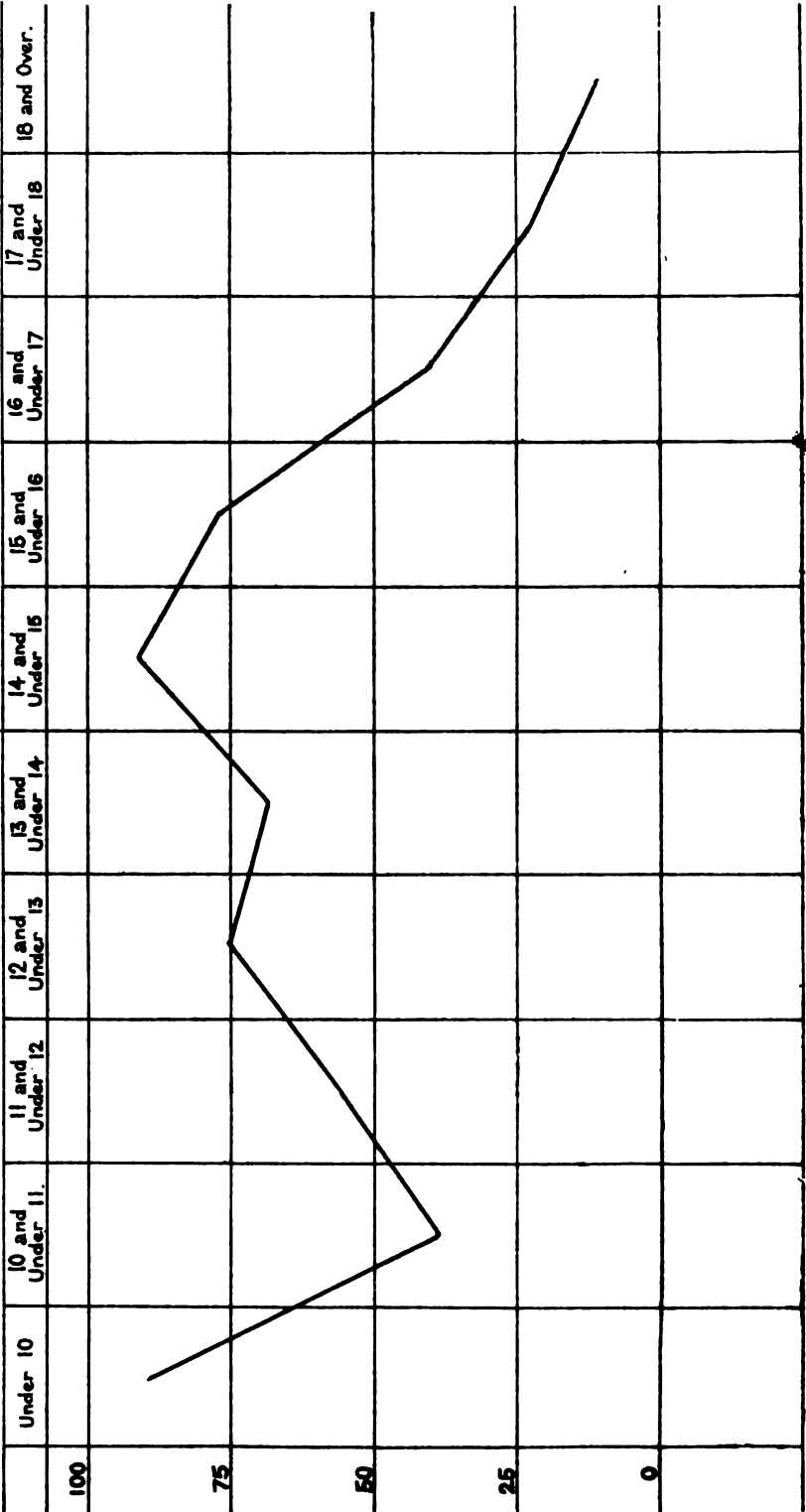
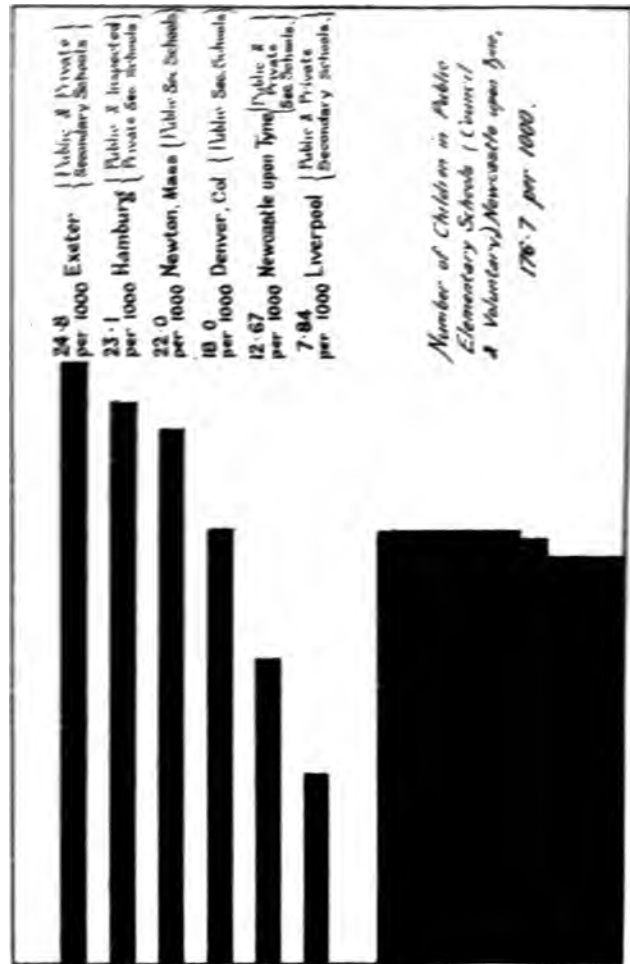




Diagram IV.

The enclosed Space represents 1000 of the population. On this is shown the total the Number of Children per 1000 of Population in (1) Public Elementary, (2) Private (Charter & Voluntary) in Newcastle upon Tyne (3) in Public & Private Elementary, (4) in Newcastle upon Tyne, Liverpool, Exeter, and Manchester and in Public & Private Schools in Denver Col. and Newton, Mass.



are not included in the numbers receiving secondary education in the City. The remaining twenty-one may be classified as follows:—

CLASS OF SCHOOL.	No. of Schools	Boys.	Girls.	Total.
Class A—Preparatory Schools for Boys	1	45	..	45
„ B—Schools for Girls, admitting Boys to Pre- paratory Classes	9	97	361	458
„ C—Schools for Girls only	1	..	35	35
„ D (1)—Schools for Boys only	6	211	1	212
„ D (2)—Co-educational School	1	15	8	23
„ D (3)—Co-educational School in connexion with Elswick Works	1	41	46	87
„ E—Kindergarten Schools	2	16	34	50
Totals	21	425	485	910

The following table shows the number, per 1,000 of population, of boys and girls in public and private secondary schools in Newcastle-upon-Tyne as compared (1) with certain other towns in England where similar inquiries were made at the same time and (2) with Hamburg where, in contradistinction to the usual German practice, the numbers of pupils in private secondary schools are included in the published statistics:—

	Pupils in all Secondary Schools (Public and Private), Spring, 1904.		
	Boys per 1,000 of Population.	Girls per 1,000 of Population.	Boys and Girls together per 1,000 of Population.
Huddersfield	3·99	3·46	7·45
Liverpool	4·14	3·70	7·84
Newcastle-upon-Tyne	6·79	5·88	12·67
Birkenhead	6·59	8·72	15·3
Hamburg (1902-3)	11·4	11·7	23·1
Exeter	11·14	13·73	24·8

Diagram IV., the space covered by which represents 1,000 of the population, shows graphically the proportion of children who in 1904 were attending (1) the public elementary schools and (2) the

public and private secondary schools in Newcastle-upon-Tyne. The respective proportions were 176·7 and 12·67 per 1,000.

The same diagram also shows to scale the proportion, per 1,000 of population, of pupils in the *public and private* secondary schools of Newcastle-upon-Tyne, Liverpool, Exeter and Hamburg, and in the *public* secondary schools of Denver (Col.) and Newton (Mass.)

The following diagrams (Numbers V.-IX.) show in graphic form the duration of the school life of all the boys who left the Royal Grammar School and the Branch School, Allan's Endowed School for Boys' and St. Cuthbert's Grammar School, and of the boys and girls who left Rutherford College Secondary Day School in the year 1903-4. In these diagrams each of the vertical enclosed spaces represents the actual school life of an individual pupil. The base line of each enclosed space marks the age at which the boy or girl entered the school in question. Its upper limit shows the age at which he or she left. Across each chart are ruled two strong black lines enclosing the space which represents the period between twelve and sixteen years of age. This period of four years may be regarded as the core or backbone of secondary education. Those are the four years within which, if the pupil comes adequately prepared, the secondary school can accomplish, not indeed its most advanced and valuable, but at any rate a solid and lasting work. There should, therefore, be on each diagram a broad belt of nearly solid attendances at the secondary schools between the two horizontal lines which mark off the space between twelve and sixteen years. But instead of that the diagrams show a jagged fringe of periods of irregular length with comparatively few cases of school life extending throughout what should be the normal period of secondary education. It will be seen in how many cases the secondary school life of the pupil begins too late and ends too soon. These diagrams reveal a grave flaw in the intellectual efficiency of secondary education in Newcastle-upon-Tyne.

Diagram V.

Royal Grammar School.
(Excluding Branch School.)

*Diagram Showing the School Life of 56 Boys, who left
the School during the Year 1903-4.
Lower Line shows Age at Entrance.
Upper Line, shows Age on Leaving.
Each Space stands for a Boy.*

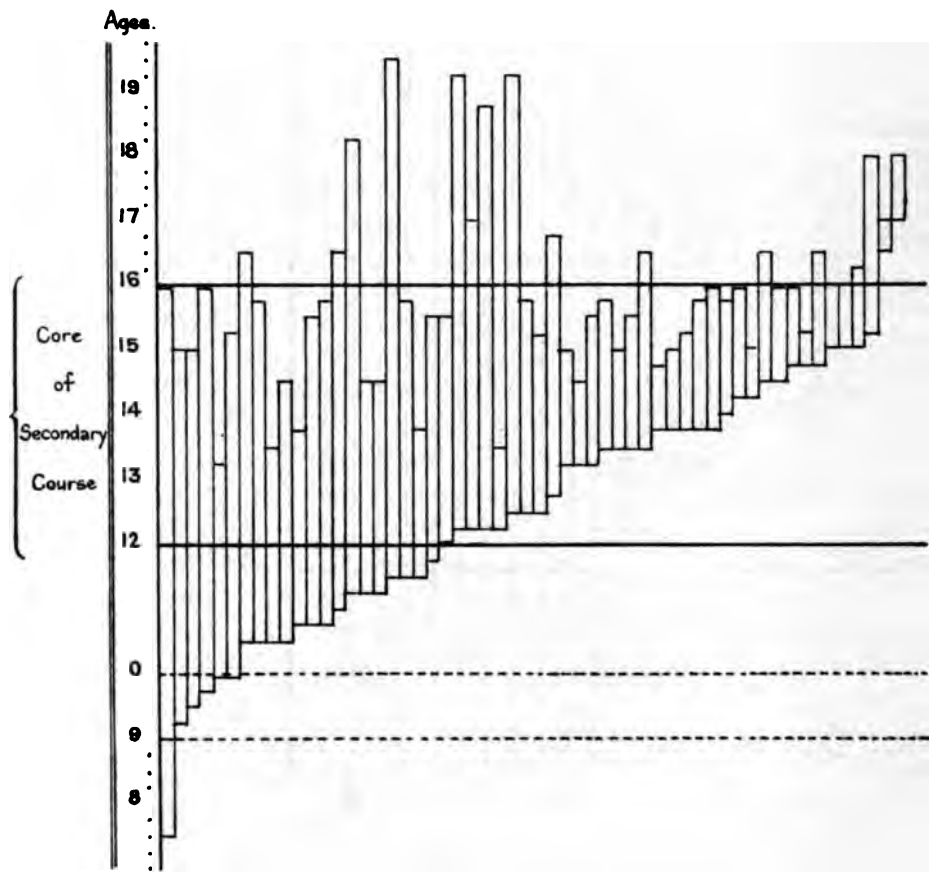




Diagram VI
Royal Grammar School .
 (Branch.)

*Diagram showing the School Life of 18 Boys
 who left the School during the Year 1903-4.
 Lower Line shows Age at Entrance,
 Upper Line, shows Age on Leaving.
 Each Space stands for a Boy.*

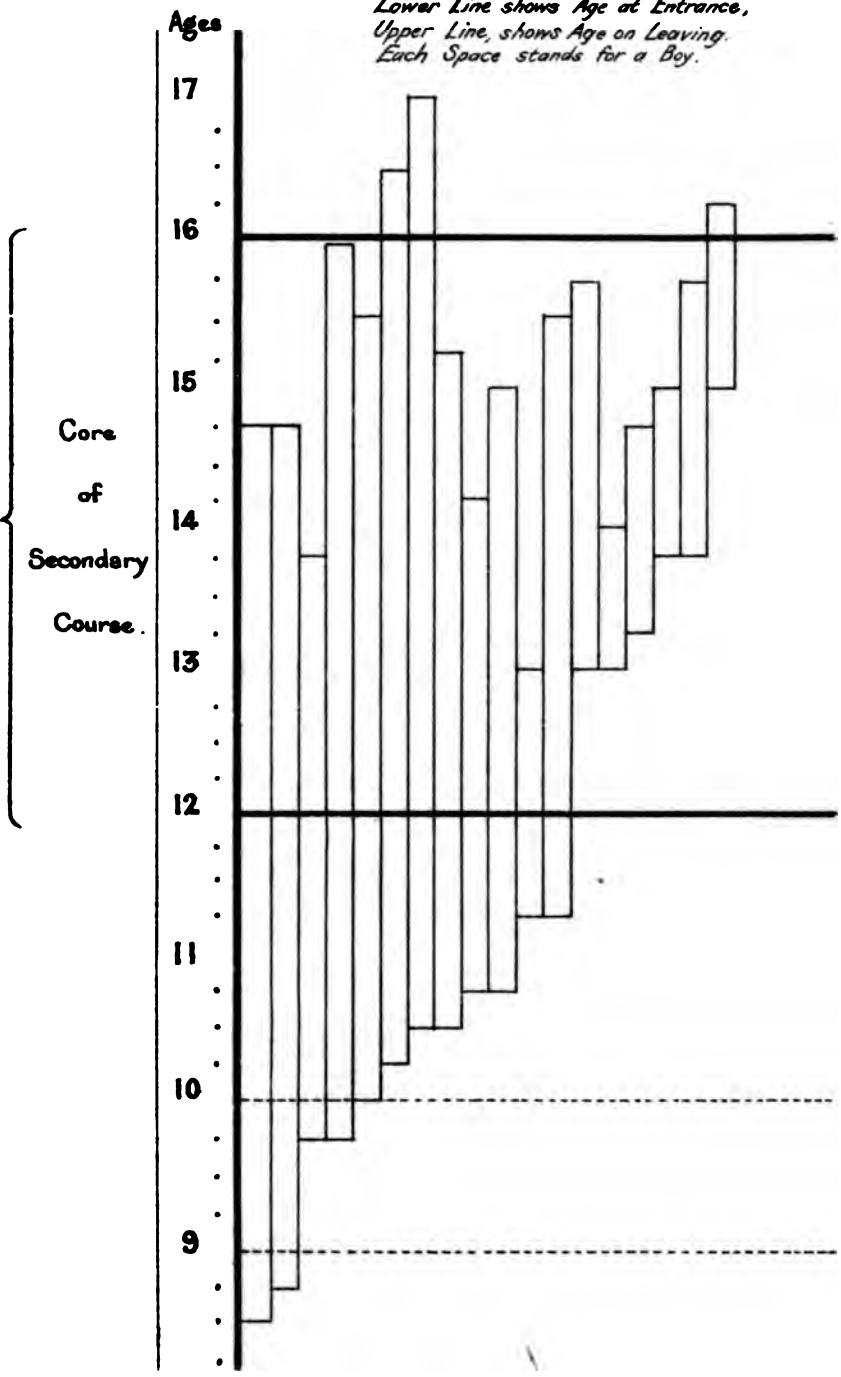


Diagram VII.
Allan's Endowed School (Boys.)

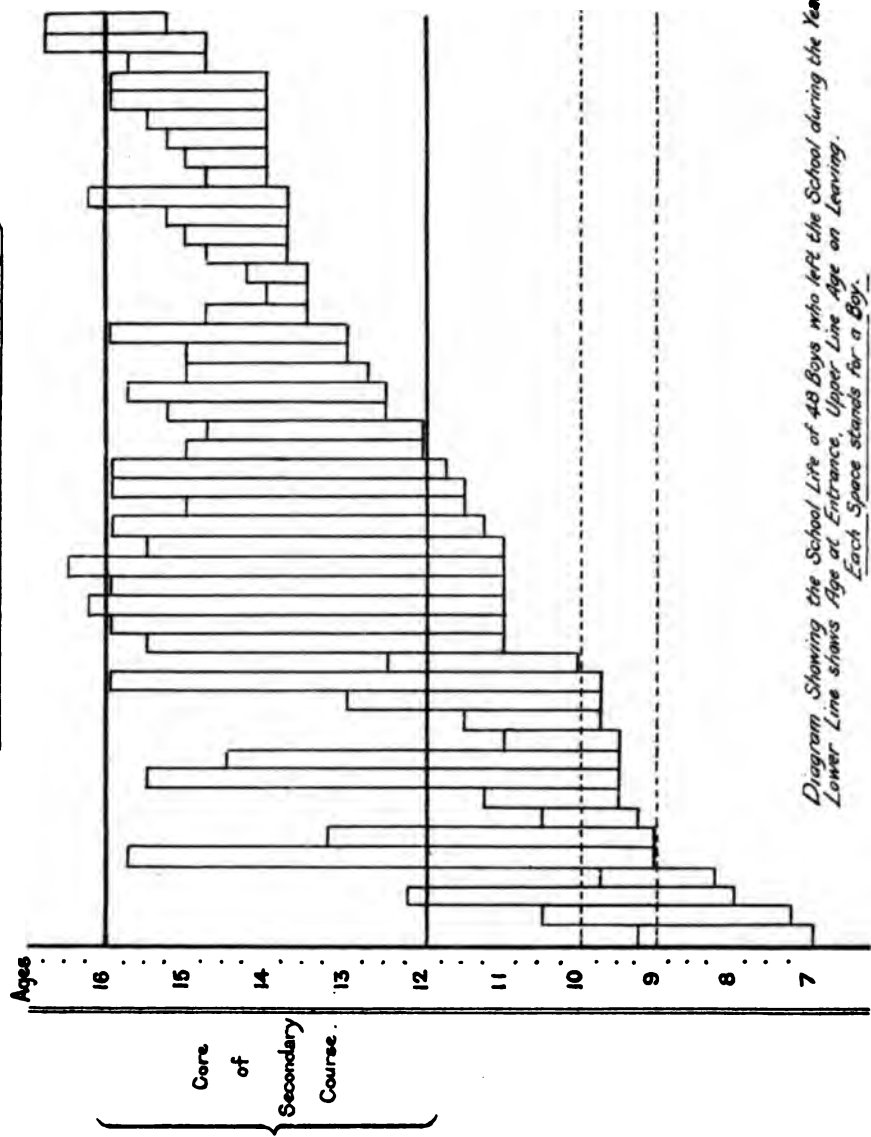


Diagram Showing the School Life of 48 Boys who left the School during the Year 1903-4.
 Lower Line shows Age at Entrance, Upper Line Age on Leaving.
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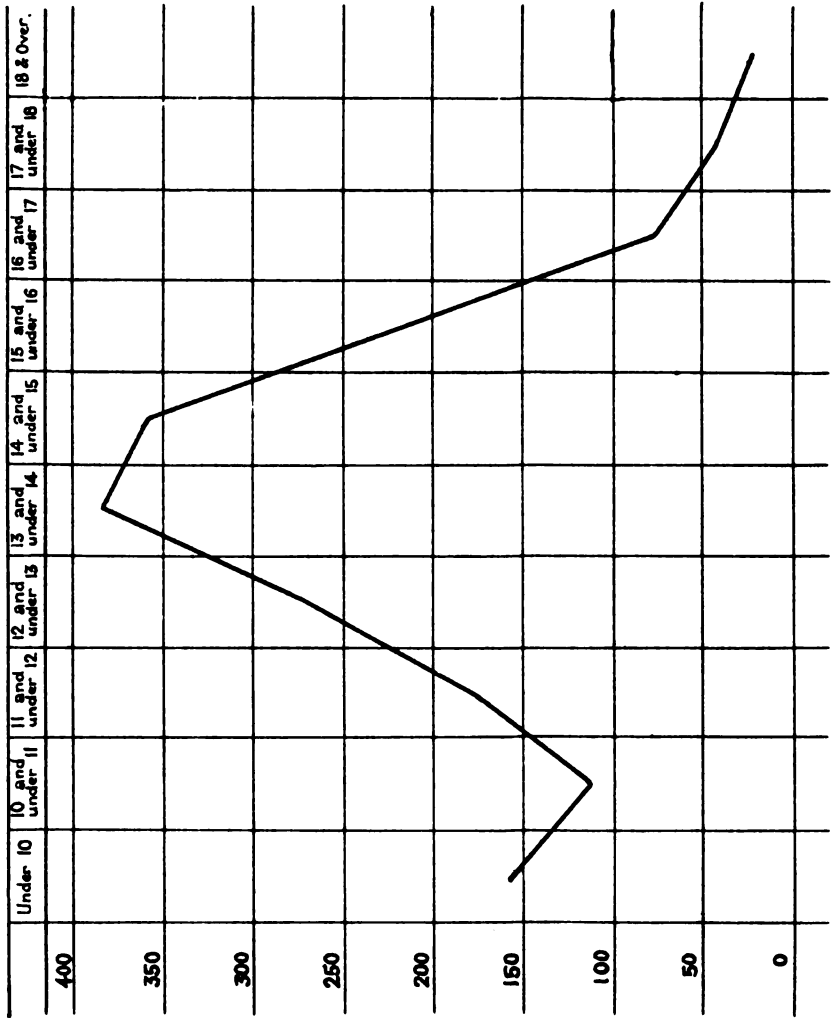




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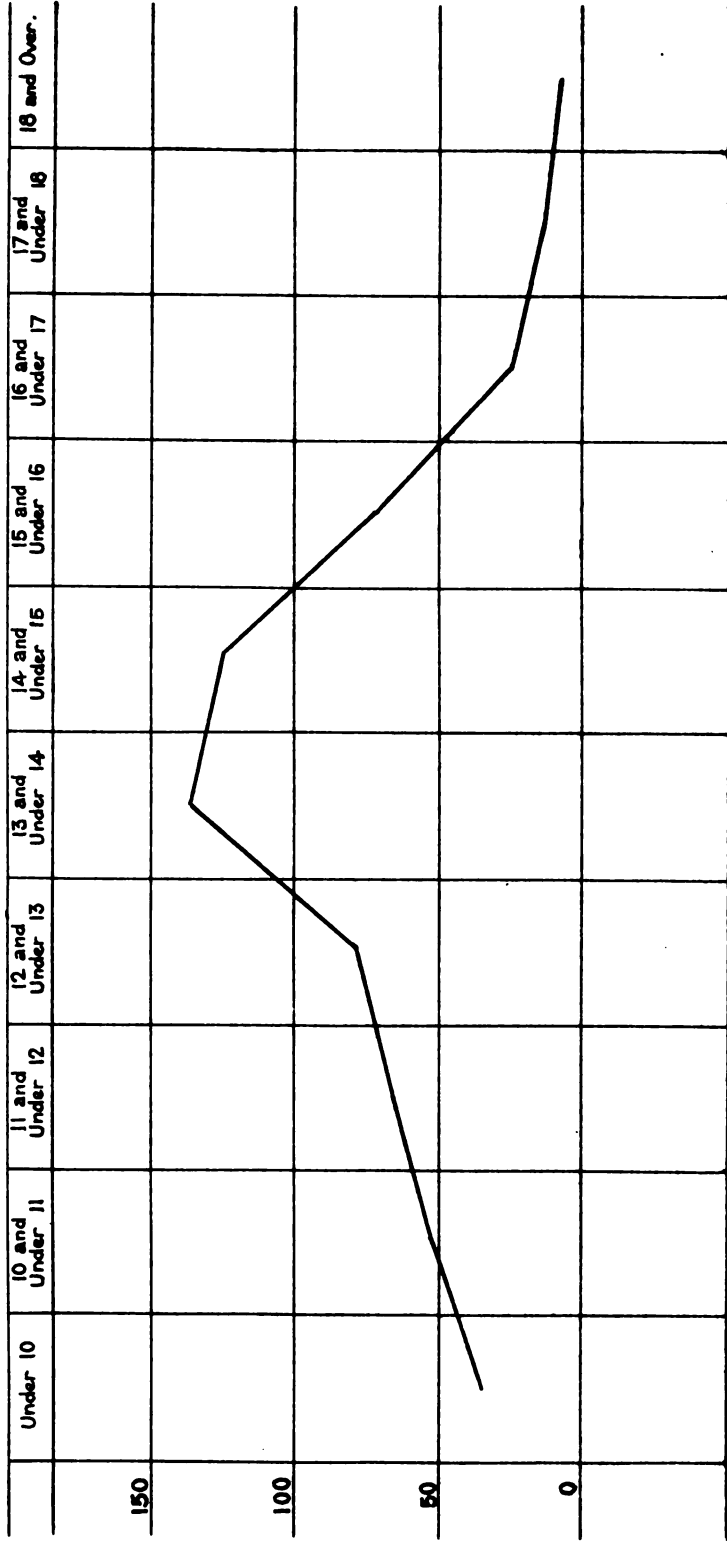




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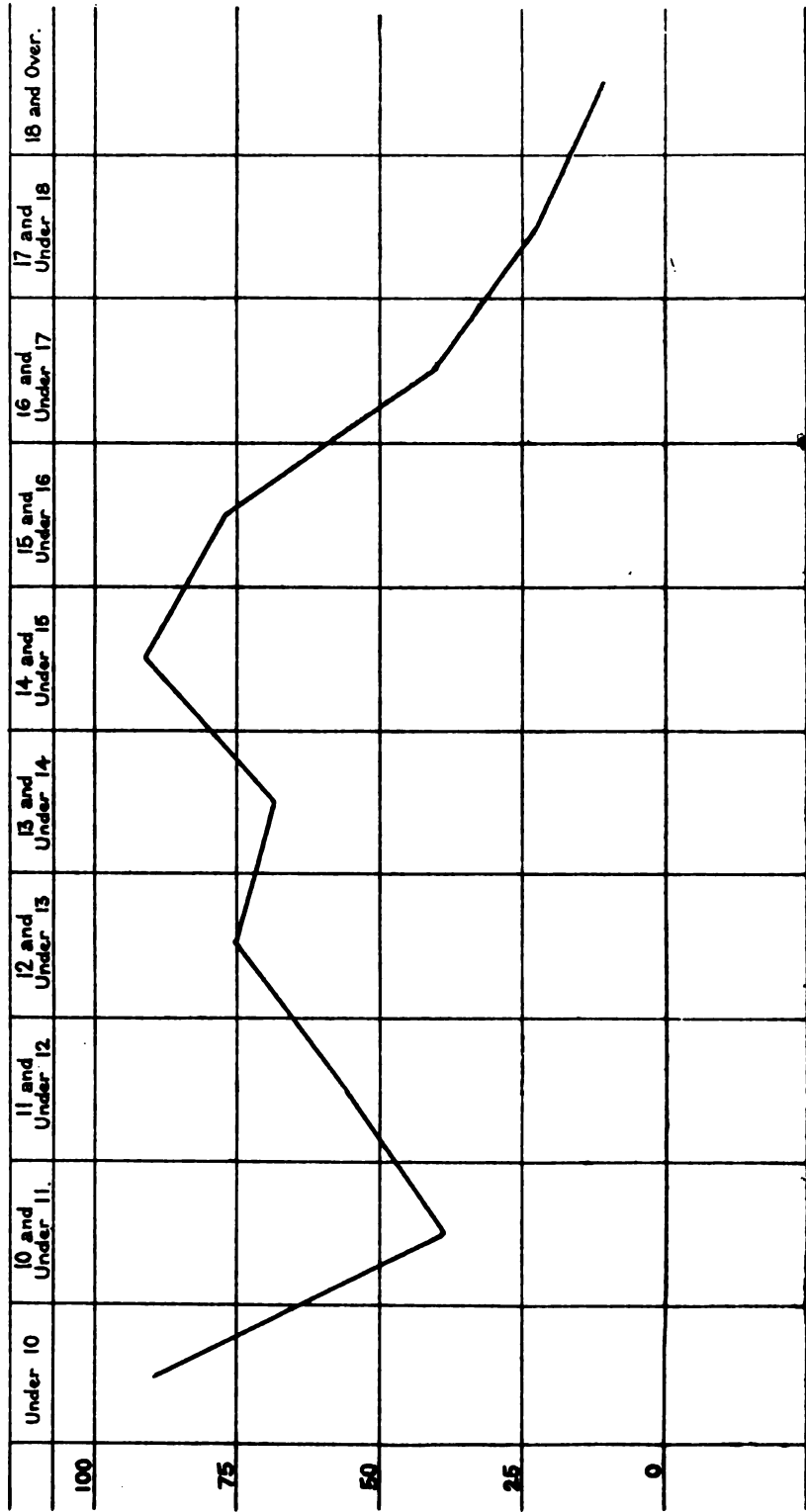
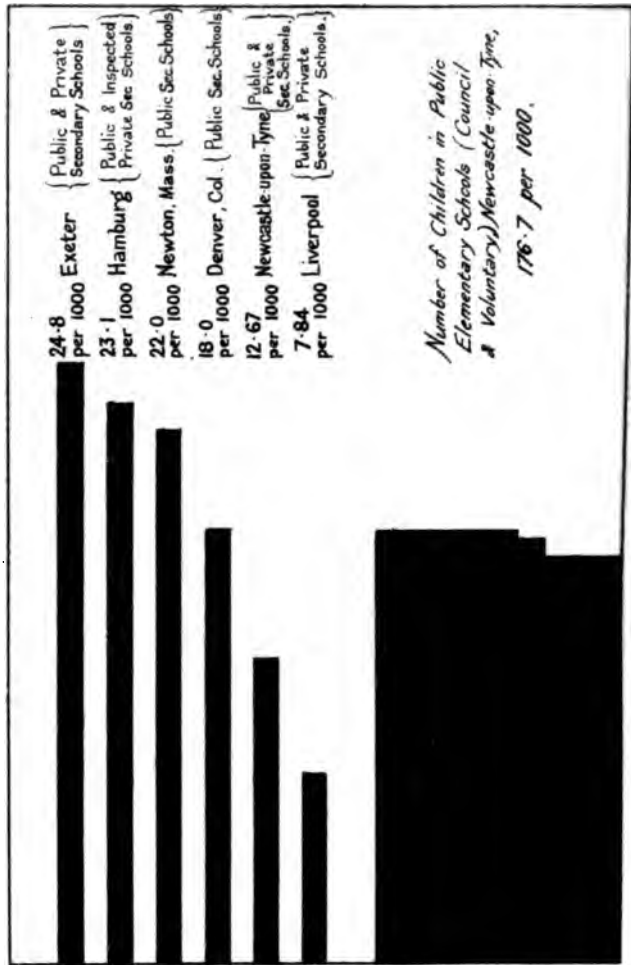




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public and private secondary schools in Newcastle-upon-Tyne. The respective proportions were 176·7 and 12·67 per 1,000.

The same diagram also shows to scale the proportion, per 1,000 of population, of pupils in the *public and private* secondary schools of Newcastle-upon-Tyne, Liverpool, Exeter and Hamburg, and in the *public* secondary schools of Denver (Col.) and Newton (Mass.)

The following diagrams (Numbers V.-IX.) show in graphic form the duration of the school life of all the boys who left the Royal Grammar School and the Branch School, Allan's Endowed School for Boys' and St. Cuthbert's Grammar School, and of the boys and girls who left Rutherford College Secondary Day School in the year 1903-4. In these diagrams each of the vertical enclosed spaces represents the actual school life of an individual pupil. The base line of each enclosed space marks the age at which the boy or girl entered the school in question. Its upper limit shows the age at which he or she left. Across each chart are ruled two strong black lines enclosing the space which represents the period between twelve and sixteen years of age. This period of four years may be regarded as the core or backbone of secondary education. Those are the four years within which, if the pupil comes adequately prepared, the secondary school can accomplish, not indeed its most advanced and valuable, but at any rate a solid and lasting work. There should, therefore, be on each diagram a broad belt of nearly solid attendances at the secondary schools between the two horizontal lines which mark off the space between twelve and sixteen years. But instead of that the diagrams show a jagged fringe of periods of irregular length with comparatively few cases of school life extending throughout what should be the normal period of secondary education. It will be seen in how many cases the secondary school life of the pupil begins too late and ends too soon. These diagrams reveal a grave flaw in the intellectual efficiency of secondary education in Newcastle-upon-Tyne.

Diagram V.

Royal Grammar School.
(Excluding Branch School.)

*Diagram Showing the School Life of 56 Boys, who left
the School during the Year 1903-4.
Lower Line shows Age at Entrance.
Upper Line, shows Age on Leaving.
Each Space stands for a Boy.*

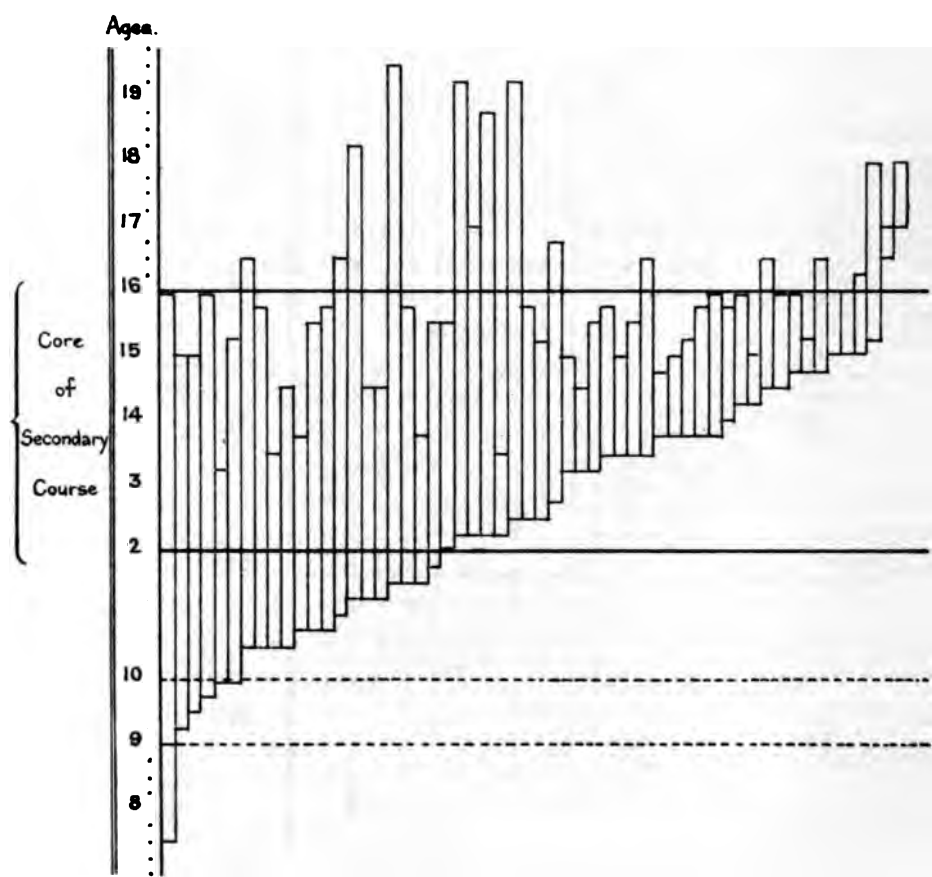




Diagram VI
Royal Grammar School.
 (Branch.)

*Diagram showing the School Life of 18 Boys
 who left the School during the Year 1903-4.*

*Lower Line shows Age at Entrance,
 Upper Line, shows Age on Leaving.
 Each Space stands for a Boy.*

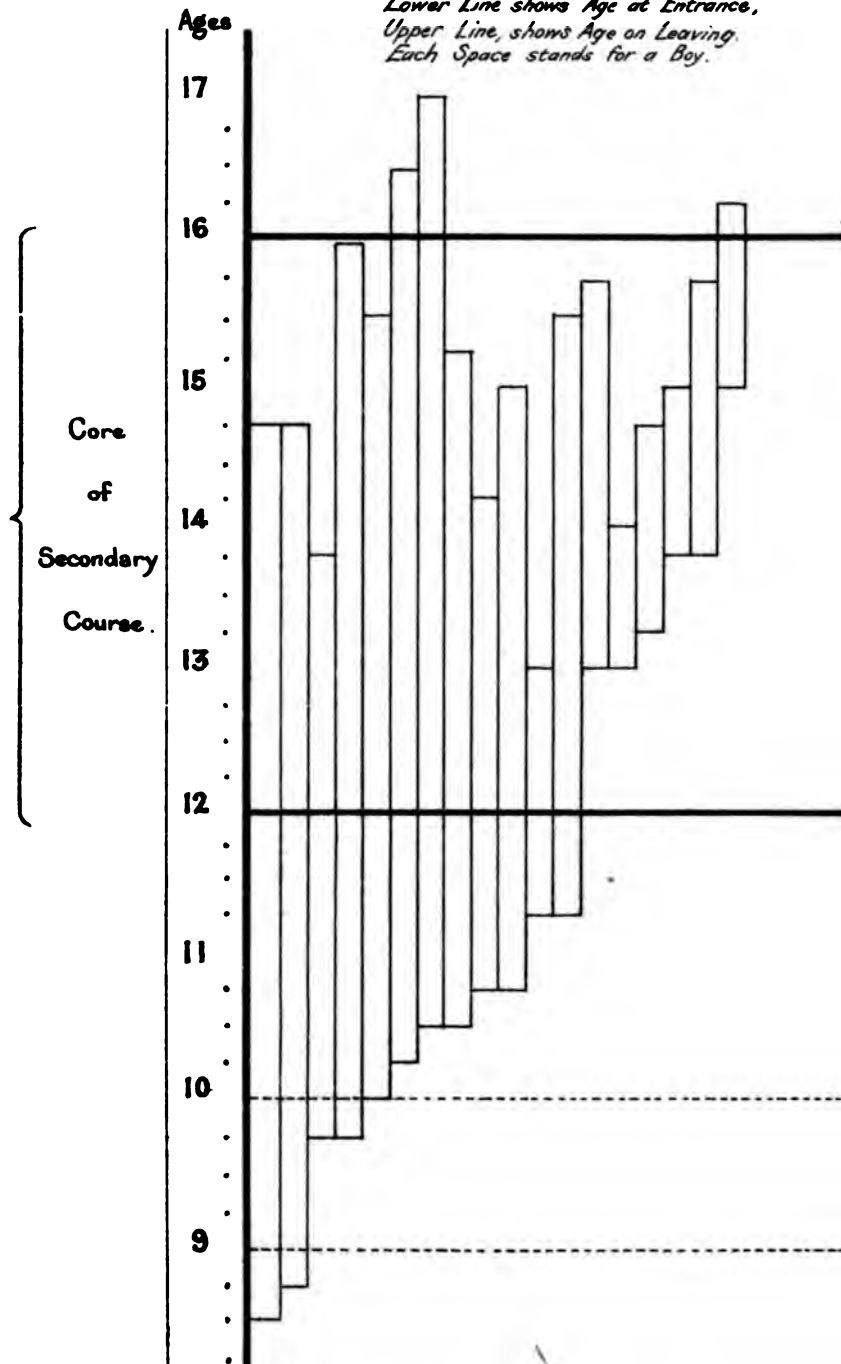


Diagram VII.
Allan's Endowed School (Boys.)

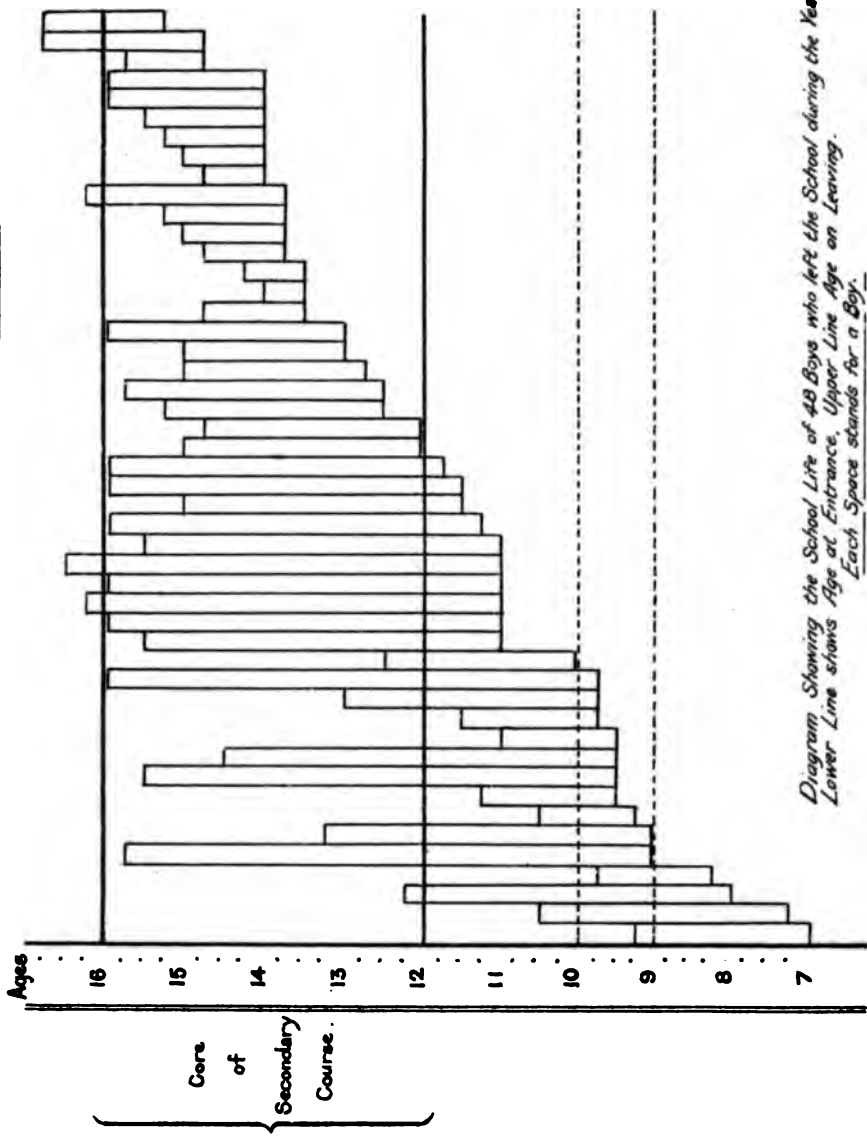
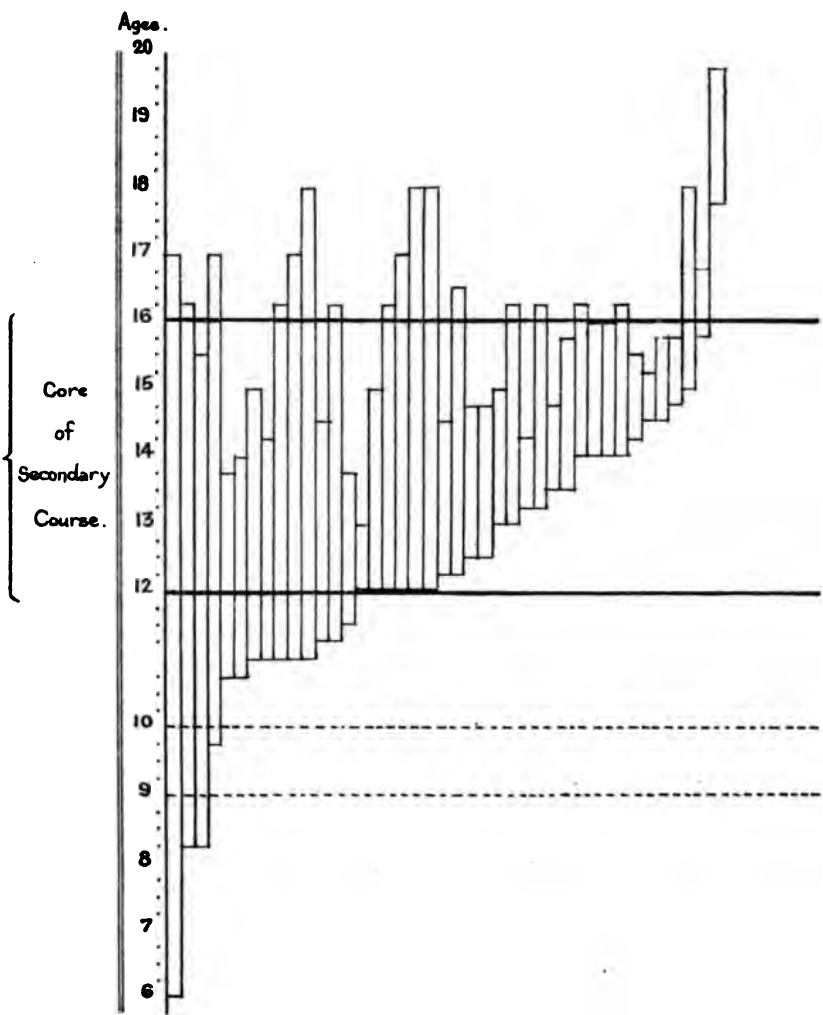


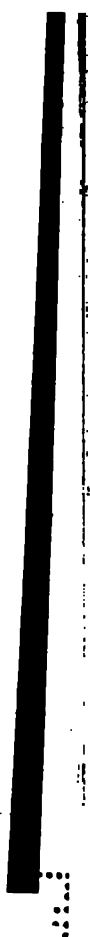


Diagram VIII.

St Cuthbert's Grammar School.

Diagram showing the School Life of 41 Boys who left
the School during the Year 1903-4.
Lower Line shows Age at Entrance,
Upper Line, shows Age on Leaving.
Each Space stands for a Boy.

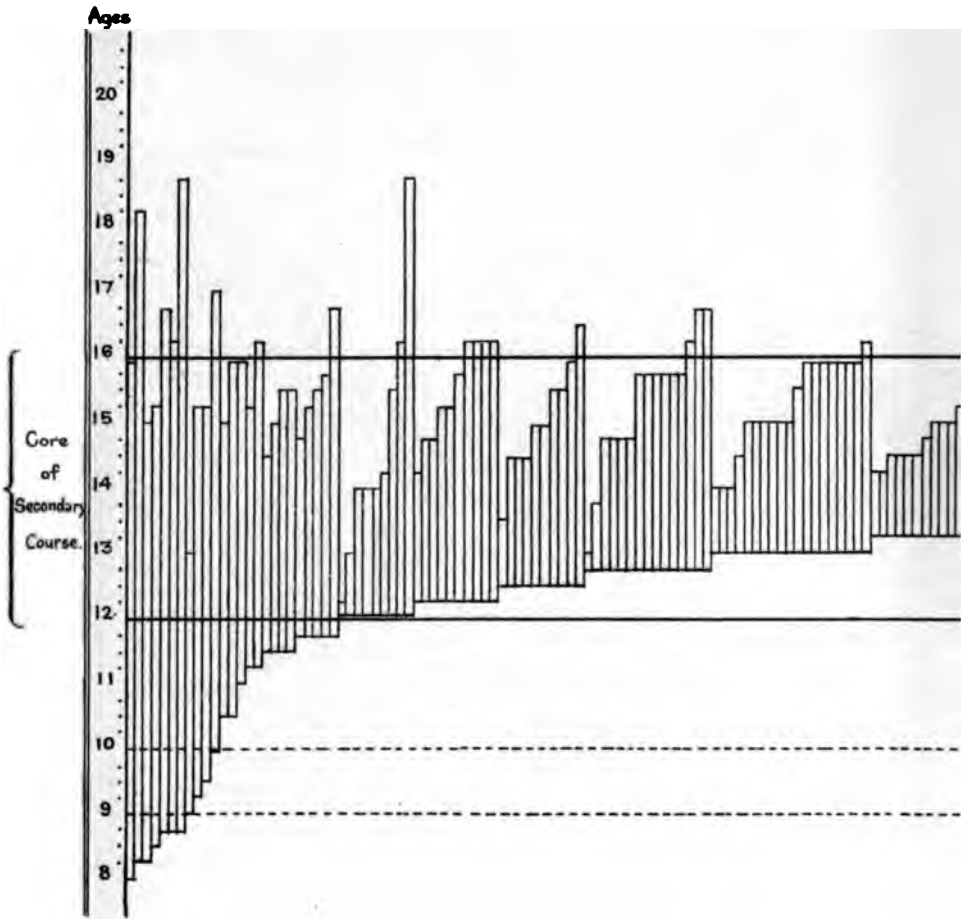




Diagram

Ruthen

Diagram Showing the School during the Year 1903
Lower Line shows Age at L
Each Space sta

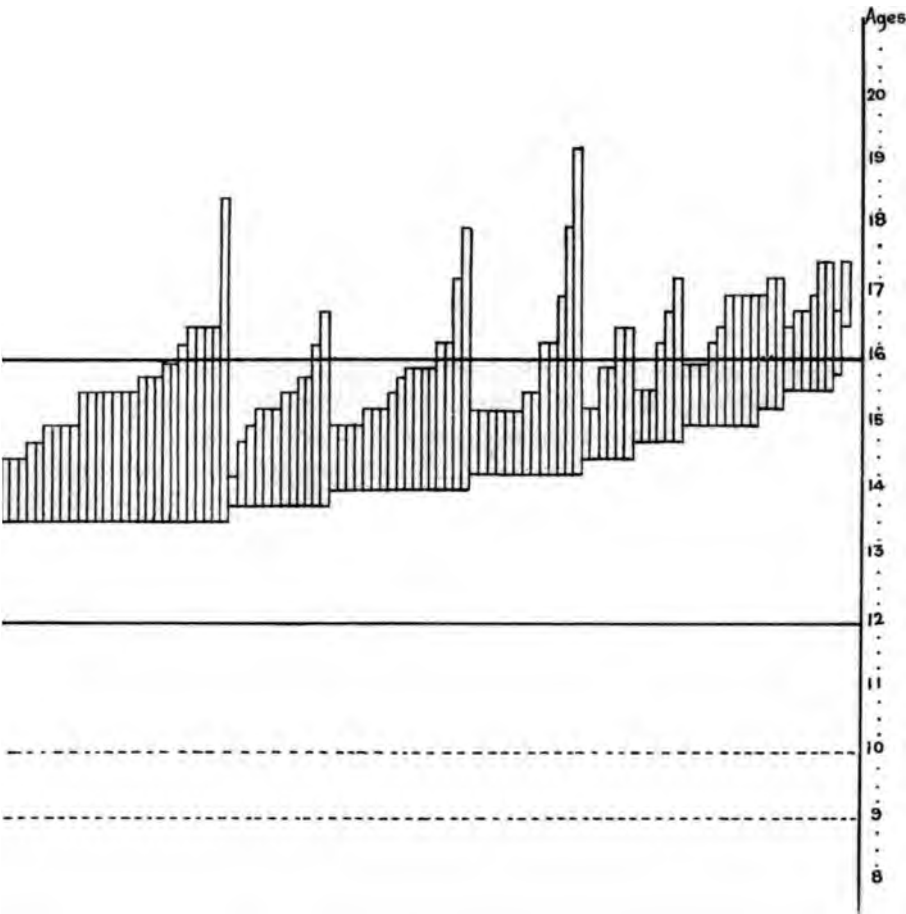


Σ.

College.

of 213 Boys and Girls who left

Upper Line, Age on leaving.
Boy or Girl.





CHAPTER III.

DETAILED DESCRIPTION OF THE PUBLIC SECONDARY SCHOOLS OF NEWCASTLE-UPON-TYNE, AND OF THE ELSWICK INSTITUTE DAY CLASSES.

(a) *The Royal Grammar School.*

This school has had a striking history, and should have a brilliant future. It was founded by Thomas Horsley, who was Mayor of Newcastle in 1525 and 1533. He bequeathed in his will certain property for the endowment of a "hye school,"* under the superintendence of the Corporation. He directs that the master be "profoundly learned and instructed in the knowledge of grammar." When Queen Elizabeth gave a "Grand Charter" to Newcastle in 1600, the school became a Royal foundation. In the Charter, the Queen spoke of herself as "often revolving in our mind how much advantage would arise to the Commonwealth of England, over which Almighty God hath been pleased to place us, that youth should be well founded from their tenderest years in the rudiments of true religion, and instructed in learning and good manners." "James I. granted a second charter in 1611, dealing with the funds of the Hospital of St. Mary the Virgin, and appropriating part to education and part to an almshouse for six poor and aged men. Up to the time of the Municipal Reform Act, the Newcastle Corporation paid the sum of £420 annually for the salaries of the teachers, and also provided a school-room and playground. But the Act released

* It is interesting to observe this early use of the expression High School. The great municipal secondary school in Edinburgh was called by the same name. The use of the words in Newcastle possibly shows the influence of Scottish educational organisation. The Record of the Town Council of Edinburgh contains the following entry relative to the High School, under date, March 19, 1531. "The quhilk day in presens of Maister Adam Otterburn, prouest, etc., Maister Adam Melvil, maister of the hie schule oblist him to mak the bairns perfyte gramariaris within thrie zeires."

the Corporation from the obligation to continue these payments, except to the existing teachers. A scheme was, in 1868, sanctioned by the Court of Chancery, for the application of the surplus revenue of the ancient Hospital of St. Mary the Virgin, and under a special Act of Parliament, 1888, a further scheme, which had been framed by the Charity Commissioners, was confirmed and established, and now governs the administration of the endowment."*

The Grammar School has upon its roll of former pupils many illustrious names. It was probably here that Bishop Ridley "learned his grammar with great dexterity in Newcastle." Colonel John Lilburne, famous in the history of political speculation as one of the pioneers of advanced democracy, received part of his education here. Here also were educated William and John Scott, the sons of a hoastman or coal fitter in Love Lane, off the Quayside, the first of whom became Lord Stowell, Judge of the High Court of Admiralty, and the second, Earl of Eldon, Lord High Chancellor of England. Here, too, also under the headmastership of the Rev. Hugh Moises, was trained that unselfish patriot and great sea captain, Cuthbert Collingwood, afterwards Admiral Lord Collingwood, the friend of Nelson, and his second in command at the Battle of Trafalgar on Oct. 22, 1805. No name gives brighter distinction to the history of the school than that of Nelson's "dear Coll."† His character, as revealed, not only at Trafalgar, but throughout his public and private life, was that of Wordsworth's "Happy Warrior."

The endowments of this school amount to £1,005 a year, £650 of which come from the funds of the Hospital of St. Mary the Virgin. The funds of the Hospital are divided between the school and other objects, and the former will share in a considerable prospective increase of income in a few years. Of the present income £150 goes to provide exhibitions to the Universities and other places of higher education, another £150 may be set down as the equivalent of providing instruction, including purchase of books, etc., for fifteen scholars from the public elementary schools, while about £100, on the average, is devoted to scholarships in the shape of remission of fees, leaving about £605 annually for general school purposes.

* Sir Joshua Fitch, Newcastle Report, 1897.

† Allusion should here be made to the letters published in the *Correspondence and Memoir of Lord Collingwood*, as they contain several pregnant and pithy remarks on education, and well deserve Thackeray's tribute to their "manly and lucid grace."

The Governing Body of the school consists of twenty-two members, eleven of whom are appointed by the City Council, and one each by the following: The University of Oxford, the University of Cambridge, Durham University, the College of Medicine, Armstrong College, the Northumberland County Council, and the Durham County Council. Four are co-opted.

The school is recognised by the Board of Education as a Secondary Day School, being included in what was known, until the recent change in the Board's regulations, as Division B., and it received, in 1903, £254 10s. in Government grants. It also has a Capitation grant of £31 from the Durham County Council, and a grant of £148 10s. from the Newcastle Education Committee, which is used to provide an additional science master.

The course of instruction comprises religious knowledge, the teaching being given, as provided by the scheme, "in accordance with the principles of the Christian Faith"; English language and literature; History or Geography; Latin; French; German; Greek, for which an extra fee is charged; mathematics; physics; chemistry; drawing; gymnastics; and, in the three lowest forms, vocal music and writing. Owing to the very different needs of various categories of its pupils, the intellectual work of the school is hampered by a lack of precision in its educational aim. For the same reason the right classification of the pupils is unusually difficult. The inspectors of the Board of Education, in their report of March, 1903, paid a tribute to the efforts which the headmaster (Mr. S. C. Logan) is making to improve the school.

The part of Newcastle where the main buildings of the school are situated is ceasing to be a residential quarter, and it has been decided to transfer the school to a new site, which has been procured for £39,000 in Jesmond Fields, near the North Road and Jesmond Road. A branch school has already been opened in Jesmond and is doing good work, and when the new school, which it is proposed to build at a cost of £25,000, is opened, the two schools will be united in the same building. In view of this approaching change, it is not necessary for me to give any detailed description of the present buildings, which consist of eight class-rooms, one of which is used as an art room, a chemical laboratory, a physical laboratory, a lecture room for physics and chemistry, and a gymnasium and dressing-room. In the house temporarily occupied by the branch school there are six additional rooms. At the Grammar School there are a small playing field,

two tennis courts, and three fives courts, and a second field at a distance is hired for cricket and football.

The number of pupils in the school on July 1, 1904, was 273, all of whom were day pupils. 191 were in the main school and 82 in the branch. Of these 273, 66 (or 24·17 per cent.) were under 12; 189 (or 69·23 per cent.) were between 12 and 16; and 18 (or 6·6 per cent.) were 16 or over. Eighty-five (or 31·13 per cent.) had been in the school three years or over. The majority of the pupils come to the Grammar School from private schools, but a number also come from public elementary and higher grade schools and some from other public secondary schools. At the time of my visit, the number of pupils drawn from each of these sources was as follows:—138 (or just over 50 per cent.) from private schools; 86 (or 31·5 per cent.) from public elementary schools; 20 (or 7·32 per cent.) from higher grade schools; and 22 (or just over 8 per cent.) from other secondary schools. The remaining seven pupils had not previously been at school. The minimum age at entrance is seven years, and the average for the two schools together 10·7 years. For the main school alone the average age at entrance is 10·9 years, and for the branch school alone 9·6 years.

In December, 1903, 133 boys were attending the school from outside the city boundary, the following being the principal districts from which they were drawn:—Gateshead, 32; Tynemouth, etc., 21; Gosforth, 12; Wallsend, 7; *Benwell, 7; Sunderland, 6; Hexham, etc., 6; Benton, 5; Whickham, etc., 5; South Shields, 7; Annfield Plain, 4.

About 10·6 per cent. of the pupils go on to the Universities or other places of higher education. Of the rest 25·5 per cent. take up various professions (including that of architect, solicitor, chartered accountant, elementary school teacher, and the civil service); 10·6 per cent. enter banks and insurance offices; 4·3 per cent. enter merchants' offices; 8·5 per cent. take up engineering and other apprenticeships; 6·4 per cent. go into retail trade; 2·09 per cent. enter manufacturing industries; and 8·5 per cent. take up agriculture. The after career of 23·51 per cent. of the boys is not given.

The staff consists of the Headmaster (Mr. S. C. Logan, M.A.) and fourteen assistant masters, exclusively attached to the school; and one visiting teacher for physical exercises. Ten of the assistant masters are graduates, and all are qualified for registration in Column B. of the Teachers' Register, though only three are actually so registered.

* Now included in the city.

The aggregate yearly salary of the fourteen assistant masters is £2,395, an average of just over £171. The highest is £245 and the lowest £120. Their average number of hours, per week, of teaching is 26.28.*

There is a uniform tuition fee throughout the school of £9 a year, with £3 a year extra for Greek. In addition every boy is expected to contribute a small amount each term for games and the school magazine.

Except in the year in which the inspection of the Board of Education takes place, the school is examined annually by examiners appointed by the Governors. For many years this annual examination has been conducted by the Durham University Schools Examination Board. Pupils are also prepared for the Cambridge University Local Examinations, and for open scholarships at the Universities.

There are fifteen scholarships tenable at the school by boys who have been for not less than three years in any of the public elementary schools in the school district of Newcastle-upon-Tyne. These scholarships are tenable for three years; and five are awarded every year. There are fifteen such scholars at present in the school. There are also Foundation Scholarships which take the form of exemption, or partial exemption, from fees; one boy in every twenty may be totally exempted, and one in every ten partially exempted. The funds of the school, however, have never permitted the Governors to carry out this provision fully, and at present only five are totally exempted and five partially exempted. There are also five scholarships to enable pupils to continue their education after leaving the school. One of £75 per annum, three of £40, and one of £30. Three of the five are at present held, two at Cambridge and one at the College of Medicine, Newcastle-upon-Tyne. Each of these scholarships is tenable for three years.

The games—cricket, football and fives—are as well organised and as successful as can be expected in the circumstances. But the playing fields are not only small, but inconveniently situated and otherwise unsuitable for their purpose, and it has not been possible properly to develop this important side of school life.

It is to be hoped that better provision for games will be made when the school is transferred to the new buildings.

It should be added here that many boys from this school served with distinction in the South African War, 1899–1902.

* See note at end of chapter, page 33.

*(b) The Central Newcastle High School for Girls.**(Girls' Public Day School Company.)*

This school is rendering a highly important educational service to Newcastle. The work of the Headmistress (Miss Moberly) and of her staff calls for high commendation. It is one of the schools of the Girls' Public Day School Company, and was begun as a preparatory school in May, 1889, and opened as a high school in 1895. It was removed to the present premises in 1900. The school is provisionally recognised by the Board of Education as a Secondary Day School and was included, until the recent change in the Board's regulations, in Division B. The Government grant received in 1903 was £29 9s. 8d. The school has no endowments and receives no grant from any other source. The aim of the school, in the words of the Headmistress, is to turn out girls "who shall be ready to enter on life with zest, energy and agreeableness to themselves and others." The teaching in the school is excellent and the course of study well arranged. It includes religious knowledge; English language and literature; history and geography; Latin, German, French, the two first being alternatives in certain forms; mathematics; natural science, including nature lessons (in the Kindergarten and lowest forms); physics, chemistry and botany, taken in succession; vocal music; drawing; drill and gymnastics. The staff are highly qualified and zealous in their service of the school. The teaching of English subjects is admirable and that of science particularly satisfactory. The work in the Kindergarten is excellent. On the occasions of our visits, my colleague and I heard good lessons in Latin, in modern languages, and in mathematics, and were struck by the spirit shown in the vocal music. The physical exercises are skilfully and briskly conducted.

The school buildings, which consist of a hall, twelve class rooms, chemical and physical laboratories, an art room, mistresses' rooms, dining room and kitchen, are attractive, skilfully designed, and suitable for their purpose. By an excellent arrangement, the dining room and kitchen are placed at the top of the building.

There is accommodation for 295 pupils, and in the summer term, 1904, the number in the school was 168, including three student-teachers and eleven little boys in the Kindergarten. The minimum age at entrance is four years and the average between nine and ten. Of the 165 pupils, 60 (or 36·36 per cent.) were under twelve; 76 (or 46·06 per cent.) were between twelve and sixteen, and 29 (or

17·57 per cent.) were over 16. Fifty-eight (or 35·15 per cent.) had been in the school three years or more, and of these 12 (or 7·27 per cent.) had been there for six years or more. The children come for the most part from private schools or straight from home, but a certain number come from the public elementary schools. The numbers in these three categories at the time of my visit were—78 (or 47·27 per cent.) from private schools; 65 (or 39·39 per cent.) straight from home; 15 (or 9·09 per cent.) from public elementary schools, including one from a higher grade school.

In October, 1908, there were 38 children coming in daily to the school from outside the city boundaries; the principal districts from which they were drawn being Tynemouth, Monkseaton, Blyth, Benton, North and South Shields, Gosforth, Swallowwell, and Ryton.

The girls for the most part live at home after leaving school or go for a time to some south country boarding school, but a certain number go on to the Universities or other places of higher education, and various careers have been taken up by others, including that of Art (including Arts and Crafts), bookbinding, sick-nursing, millinery and dressmaking, cookery (as lady-cooks), laundry (as laundry matron), confectionery. One or two have entered merchants' offices and one has become a chemist's dispenser.

The staff consists of the Headmistress (Miss Moberly) and nine assistants exclusively attached to the school; and eleven visiting teachers. The headmistress and three of the assistant mistresses have degrees or their equivalents, and five, including the Headmistress, are registered in Column B. of the Teachers' Register; the Headmistress and two others hold the Cambridge Teacher's Certificate. The average number of hours per week of teaching for the assistant staff is 18·6, including five-and-a-half-hours spent by the kindergarten mistress in instructing the student-teachers. The Headmistress herself teaches for seventeen out of the twenty weekly school hours.*

The fees are: for the Kindergarten (four to seven years of age), £6 6s. a year; for pupils from seven to ten years of age, £10 10s. a year; for those remaining after ten, and for those entering the school between ten and thirteen, £13 10s.; for pupils entering the school above 13, £16 10s. Extra subjects are pianoforte and violin, each £6 6s., or £7 17s. 6d. a year; harmony and painting, each £3 3s. a year; French or German conversation, £1 11s. 6d. a year; and dancing (autumn term only), £1 15s. There is also an entrance fee (to the Main School) of £1 1s., and a charge of 5s. a term for stationery,

* See note at end of chapter, page 38.

5s. a term to any girl learning practical chemistry, and a small charge for drawing materials. Middle-day dinner can be obtained at the school for 9d. a day. All the pupils are day-pupils, so far as the school authorities are concerned; but those from a distance can be boarded close to the school, at a charge of 40 guineas a year for weekly, or 50 guineas a year for terminal boarders. In the summer term, 1904, there were five pupils so boarded.

The Science and Art work of the school is inspected by the Board of Education, and the whole school is inspected at irregular intervals by the visiting officer of the Company. In addition, it is examined annually by the Oxford and Cambridge Schools Examination Board, and by the Royal Drawing Society. Other Examinations for which pupils are prepared, are the Matriculation Examination of the University of London, and those of the Associated Board of the Royal Academy and the Royal College of Music, and of the London Institute of Needlework.

A Company's Scholarship of £15 per annum, tenable for two years, is awarded every year to a girl between 15 and 17 years of age, who has been at least one year in one of the Company's Schools.

The school games, which are vigorously carried on, include cricket, hockey, tennis, and basket ball. Swimming is also taken, and in the summer term, field club expeditions and botanical walks are organised. There is a large asphalt playground, with tennis courts, attached to the school, and the games club hires a field for cricket and hockey.

(c) *Newcastle High School for Girls.*

(Church Schools Company.)

Excellent work is being done by this school, which holds an important place in the higher secondary education of Newcastle. It is one of the schools of the Church Schools Company, and was founded in 1885. The religious instruction is given in accordance with the doctrines of the Church of England, but pupils may be withdrawn from all or any of the scripture lessons at their parents' wish. The school is recognised by the Board of Education as a Secondary Day School, and was included, until the recent change in the Board's regulations, in Division B. There are no endowments.

The curriculum is of the usual high school type, and comprises religious knowledge; English language and literature; history and geography; Latin, German, French, the two first being alternatives in the four highest forms; Greek, in the two highest forms;

mathematics; natural science, including botany and physics; music, both vocal and instrumental; drawing; needlework; drill and gymnastics; and, in the two lowest forms, writing. The staff is highly qualified. The children are bright and alert. The drilling is well attended to, and physical exercises receive every care. The school, like the Central Girls' High School, produces a highly favourable impression upon the visitor who inspects it.

The buildings are modern, attractively designed and excellently adapted for the purposes of a school. The class-rooms are six in number. There is a chemical laboratory used as an additional class-room, a good gymnasium, an art room, a finely proportioned hall and a dining room. A good collection of books of reference would be a benefit to the school. The cloak-rooms are spacious and well arranged, and the rooms are well lighted and well ventilated.

There is accommodation for 150 pupils, and the number in the school in the summer term, 1904, was 145, of whom three were little boys in the Kindergarten. The minimum age at entrance is four years and the average eleven. Of the 145 pupils in the school at the time of my visit, 44 (or 30·35 per cent.) were under 12; 75 (or 51·72 per cent.) were between 12 and 16; and 26 (or 17·93 per cent.) were over 16. 73 (or 50·34 per cent.) had been in the school three years or over, 15 (or 10·34 per cent.) having been there six years or over. Three of the pupils in the school had come from public elementary schools. Of the rest about half came from private schools and half straight from home, without any previous school teaching.

In November, 1903, there were in the school 51 pupils from outside the City boundaries, the principal localities from which they were drawn being Gosforth, Benton, Monkseaton, Whitley Bay and the northern part of County Durham.

During the last five years thirteen girls have gone on to Universities or other places of higher education and nine have taken up teaching as a profession. To one was awarded the first open scholarship in Arts at the Armstrong College.

The staff consists of the Headmistress (Miss L. M. Gurney), seven assistant mistresses, and two student-teachers, exclusively attached to the school; and five visiting teachers. Four of the teachers, including the Headmistress, have University degrees or their equivalent; two hold Teachers' Certificates or Diplomas, and three (including the Headmistress) are registered in Column B of the Teachers' Register. One other is qualified for registration, but at the time of my visit was not actually included in Column B.

The average salary of the seven assistant mistresses is £93 11s. 5d., the highest being £105 and the lowest £60. It should be added, however, that three of them receive extra payment for music pupils and one for instruction given to the student-teachers. Their average number of teaching hours per week is nineteen.*

The tuition fees are as follows:—For pupils under 7 years of age, £6 6s. 0d. per year; for those between 7 and 10 years of age, £9 9s. 0d.; for those over 10, but entering the school under 13 years of age (for the rest of the school course), £12 12s. 0d.; for those entering after 13 years of age, £15 15s. 0d.

The following are extra subjects:—Pianoforte, £1 5s. to £2 2s. per term; harmony, 10s. 6d. per term; violin, £2 2s. per term; dancing, £1 17s. 6d. per term; painting and elocution, each £1 1s. per term. There is also an entrance fee of £1 1s. and a fixed charge of 5s. per term for stationery, and 1s. for drawing materials.

The school is inspected yearly by the Inspector representing the Council of the Company and is also examined periodically by the Cambridge Syndicate for Local Examinations and by outside examiners appointed by the Council. It was inspected by the Board of Education, previous to recognition, during the third term of 1902. Pupils are also entered for the Matriculation Examinations of the Universities of London and of Durham, for the Cambridge Local Examinations, and for the Examinations of the Royal Drawing Society and the National Froebel Union. There is one Company's scholarship of £10 per annum attached to the school. It is awarded, provided a sufficient standard of merit be attained, to the pupil in the school who, being under eighteen years of age, stands first in the annual school examination; and is tenable at the school for one year.

The girls are encouraged to play games out of school. There is a good playground with asphalt tennis court at the school, and a playing field is hired from the Orphange grounds close by.

(d) *Rutherford College Secondary Day School.*

Rutherford College is an institution very well known over a wide area. It attracts large numbers of students from Newcastle and its vicinity. The success of the College is due in no small measure to the sagacity and educational skill of the Headmaster, Mr. A. M. Ellis, who, in his approaching retirement, will have the satisfaction of looking back upon a long career of public usefulness and of faithful service to many generations of his pupils.

* See note at end of chapter, page 33.

The College was founded in 1877 by the late Dr. John Rutherford, and others, as a school of science and art, in connexion with South Kensington. When Dr. Rutherford died in March, 1890, negotiations were in progress with the Corporation of Newcastle for the site of the present building, which was finally obtained after his death, on a 99 years' lease. His committee resolved to carry out the undertaking and to name the new building "Rutherford College," and the foundation stone was laid in 1892. In 1895 the day school was reorganised as an "Organised Science School" under the then new regulations of the Board of Education, and is now recognised by the Board as a Secondary Day School. Until the recent change in the Board's regulations, it was included in Division A. The Government grant for the year 1902-3 amounted to £2,072 1s. 8d. on 443 pupils. There are no endowments, but the College receives from the City Council a grant of £1,150 a year, and, of this amount, £650 is usually assigned to the day school. The latter also receives a capitation grant of about £40 a year from the Durham County Council in respect of pupils from the county area. Of the £650 from the City Council, rather over £300 a year goes to pay the fees and provide books for corporation scholars. The college is not connected with any religious body and no denominational religious instruction is given. The large building is used for both day and evening work. The curriculum of the day school, which is organised on co-educational lines and consists of the recognised Secondary Day School and a Preparatory Department, is complex and copious and includes for both boys and girls English language and literature, history and geography, Latin, French, German, mathematics, physics, chemistry, mechanics, drawing, and vocal music. In addition to the above the girls learn physiology, hygiene, needlework and cookery and the boys have manual training. A good many alternatives are however allowed, especially in the higher classes. The teaching is meritorious and in many respects excellent.

The number of pupils in the school on June 24th, 1904, when it was closed for the summer holidays, was 638: 401 boys, and 237 girls. Of these, 398 (252 boys and 146 girls) were in the recognised Secondary Day School, and 240 (149 boys and 91 girls) were in the Preparatory Department. The total numbers on the registers in the Secondary Day School and the Preparatory Department during the session 1903-4 were 443 and 263 respectively.

There is no age limit laid down in the Junior Department, but pupils are usually eight or nine years old, at least, on entering. The

necessary qualifications for entry in the lowest class are that the intending scholar be able to read an easy English book, such as the Standard III. Reader, and to answer easy questions in the first three rules of arithmetic. In the Senior School pupils must have passed Standards VI. or VII., or an equivalent test. Very few are admitted under twelve years of age, the minimum age laid down by the Board of Education for schools of this type until it was raised to thirteen by the 1904-5 regulations. The average ages at entry are: Preparatory Department, 10 years; Secondary School, 13½ years.

Of the 638 pupils in the school at the end of the last summer term, 105 (or 16·46 per cent.) were under the age of 12; 510 (or 79·94 per cent.) were between 12 and 16; and 23 (or 3·6 per cent.) were over 16. One hundred and thirty-seven (or 21·47 per cent.) had been in the school three years or over, and of this number 13 (or 2·04 per cent.) had been six years or more in the school. The majority of the 443 pupils on the registers of the Secondary Day School (267, or 60·27 per cent.) came from public elementary schools. The rest, with the exception of one pupil who came from a private school, had previously been in the Preparatory Department. Of the 263 on the registers in the Preparatory Department, 211 (or 80·23 per cent.) came from public elementary schools, and 52 (or 19·77 per cent.) from private schools.

In December, 1903, 335 pupils (216 boys and 119 girls) were coming in daily to the school from outside the city boundaries, the principal districts from which they were drawn being Gosforth, Benwell,* Tynemouth, Morpeth District, Blaydon and Ryton, Wallsend, North Shields, Whitley, Blyth District, Annfield Plain District, and Hexham. In twenty-nine cases out of the 335, however, the parents were in business in Newcastle.

The proportion of boys who continue their education after leaving the school, or who enter at once upon various professions or trades, may be roughly estimated as follows:—About 5 per cent. go on to Universities or other places of higher education, and 10 per cent. to the evening technical classes at Rutherford College. About 35 per cent. take up engineering and other apprenticeships (building, etc.), 15 per cent. go into merchants' offices, and 13 per cent. into wholesale and retail trade. About 9½ per cent. become teachers, and about 2 per cent. enter other professions (that of architect, solicitor, chemist, etc.). A few, probably from 3 to 5 per cent.,

* Now included in the city.

enter manufacturing industries, and about $2\frac{1}{2}$ per cent. take up agriculture. A few pupils every year take up articled clerkships or similar semi-professional positions, and a few enter banks and insurance offices. Of the girls, 30 per cent. stay at home after leaving the school.

The staff consists of the Principal, Mr. Andrew Murray Ellis, and thirty assistant teachers, twenty-four men and six women, exclusively attached to the school; and one visiting master for advanced French, and another for German. Arrangements are, however, being made for a modern language master, who will be a regular member of the staff.

The average salary of the assistants is between £141 and £142, but in eight cases payment for evening work is included. The highest salary, including evening work, is £275, and without evening work, £150. The lowest is £60 (for dressmaking and dress-cutting); twelve of the assistant teachers are graduates, and six are registered in Column B of the Teachers' Register. Fourteen, including the Principal, hold Government Certificates, and would be registered in Column A, if teaching in a Public Elementary School. Nearly the whole of the staff will, in due course, be registered in Column B.

The teaching hours in the day school are generally $27\frac{1}{2}$ per week, but are less in the case of those taking evening work, and in the case of teachers of special subjects, such as hygiene and dressmaking.*

The ordinary fee is £4 10s. 0d. per annum, exclusive of books, but a small number of pupils (between 50 and 60 each year) are admitted under certain conditions at a reduced fee of £2 12s. 6d. per annum. These are cases in which the ordinary fee would be a strain upon the resources of the parents.

The only extra subjects are music, 13s. 6d. per term, and shorthand, 5s. 6d. per term.

In addition to the regular Board of Education inspection, the school is annually examined in English subjects and languages by special examiners from Durham University, and it is intended that it shall be examined by specialists in all subjects once in every three or four years. The school does not prepare specially for any outside examinations, but the curriculum enables students to present themselves for the Matriculation or other preliminary examinations of Armstrong College, London University, and the University of Edinburgh, as well as for the University of Durham Local Examinations, and the College of Preceptors Examinations.

* See note at end of chapter, page 33.

Some students in the advanced course take the Board of Education Examinations in Higher Mathematics, Advanced Physics and Chemistry.

Thirty Corporation scholarships, tenable at the school, are offered through the City Council every year to boys and girls from the public elementary schools of Newcastle. They cover school fees and the cost of books, and are awarded for four years, on condition of satisfactory work and attendance each year. In October, 1903, there were sixty-one Corporation scholars in the school, in addition to thirty-three County Council scholars (26 from Northumberland and 7 from Durham) who had elected to hold their scholarships at the school. Until recently, there were also twenty-two Science and Art scholarships in connexion with the school, provided according to the practice (now discontinued) by which the Board of Education met the contributions of the Governors by a grant in aid.

School games are somewhat difficult to organise, owing to the large area from which the pupils are drawn, but two or three of the masters take a special interest in this side of the school life, and both cricket and football are played in a large field, which is rented for the purpose on the outskirts of the town. The boys' playground at the College is a rather small T shaped, tar-macadamised court. The girls' playground is somewhat smaller, but they have the use of the old Bowling Green behind.

(e) *Allan's Endowed Schools.*

Boys and Girls.

The school, of which these are the modern representatives, was originally founded in 1705 as St. Nicholas' Charity School. It was re-constituted, in 1877, under a scheme of the Charity Commissioners, which provided for separate schools for boys and girls. The schools were opened, with the present Governing Body and in the present buildings, in 1883. There is a joint endowment of about £1,200 a year, derived from invested securities and land at Wallsend, the girls' school being entitled under the scheme to a share of not less than two-fifths.

Neither of the schools is recognised by the Board of Education as a Secondary Day School, but classes are conducted in Science and Art which have been recognised by the Board as Day Classes. The arrangement, however, will now cease through a change in the Board's regulations. The amount received for these classes by both

schools in 1903 was £74 2s. 8d. The number of boys in the recognised classes in 1904 was 120, and girls 136. The schools receive a grant of £200 from the City Council, £40 of which goes to the girls' school. Out of the amount devoted to the boys' school a workshop (which was originally built on the first receipt of this grant) has been maintained, and the salary of the instructor has been paid.

The school buildings, which contain both the boys' and the girls' school, form a handsome block in Northumberland Road, but are internally quite inadequate for the present number of pupils. The boys' school consists of a main room, divided in two by a partition; three class rooms, one used for physics and one as a board room; a chemical laboratory, and a wood-work room, which is used also as an additional class-room. The girls' premises consist of a main room, divided into three sections by partitions; and two class-rooms, the larger of the two being divided by a partition. The smaller class-room can only be reached by going through the three divisions of the main room. There is no regular gymnasium for either boys or girls, but one of the rooms in the boys' school is turned into a gymnasium once a week. The girls have no laboratories, no art room, and no accommodation for cookery or manual instruction. There is, moreover, no teachers' room for the assistant-mistresses, and no dining room, although a large proportion of the girls stay to lunch.

The Headmaster of the boys' school has worked hard and successfully to bring the school to its present state. Considering his difficulties, he has done very well and has provided an education which meets a real want. He has gathered round him a staff of teachers of more than usual ability for this type of school. The discipline of the school is under strict control. In spite of the limited accommodation the gymnastics are well taught, but only a proportion of the boys take the course, for which an extra fee is charged. The curriculum of the boys' school includes religious knowledge, the teaching being in accordance with the doctrines of the Church of England, with the usual conscience clause; English language and literature; history and geography; Latin, which is alternative with commercial subjects in the higher, and with reading and spelling in the lower, forms; French; mathematics; chemistry; geometry in the two highest forms; drawing; manual training gymnastics; with vocal music and writing in some of the lower forms.

In no school in Newcastle did I find more strenuous efforts being made to contend against great difficulties than in the girls' side of Allan's Endowed Schools. These difficulties are caused by the inadequacy of the accommodation for the number of pupils in the school. The labours of the Headmistress and her colleagues are deserving of high praise, and their efforts merit warm encouragement on the part of the Governors and of the Education Committee. The curriculum is similar to that of the boys' school, but Latin is not taken except in the two highest forms, and the girls are not taught commercial subjects; in science, the subjects taught are botany and human physiology and hygiene, instead of chemistry and geometry; there is more vocal music; and needlework takes the place of manual training except in the lowest form. Owing to lack of accommodation it has been impossible to arrange gymnastics or any practical science for the girls. The teaching throughout is earnest and energetic. Some particularly good teaching in geography was heard. The vocal music is excellent. The weakest part of the teaching was in French.

The minimum age of entrance in the case of both schools is seven years, and the average age in the case of the girls' school is eleven years, and that of the boys' 12·4 years. The number of pupils in the schools on July 1st, 1904, was 360, 193 in the boys' school, and 167 in the girls' school. All were day pupils. Of the boys, 63 (or 32·64 per cent.) were under 12, and 129 (or 66·84 per cent.) were between 12 and 16 years of age, while one was over 16. The corresponding figures for the girls were—under 12, 30 (or 17·96 per cent.); between 12 and 16, 123 (or 73·65 per cent.); over 16, 14 (or 8·38 per cent.). 36 boys and 41 girls (18·65 per cent. and 24·55 per cent. respectively) had been in the schools for three years or over.

The previous education of the pupils is shown in the following table:—

Boys' School.

90, or 46·63 per cent.	came from Private Schools.
88, or 45·6	„ „ „ Public Elementary Schools.
10, or 5·18	„ „ „ Public Secondary Schools.
5, or 2·59	„ had been taught at home.

Girls' School.

81, or 48·5 per cent.	came from Private Schools.
63, or 37·72	„ „ „ Public Elementary Schools.
16, or 9·58	„ „ „ Public Secondary Schools.
5, or 3	„ had been taught at home.

The previous education of two girls is not given.

In November, 1903, there were in the schools 65 boys and 61 girls from outside the city borders. The principal localities from which they came were :—Gosforth, 39 (23 boys and 16 girls) ; Forest Hall and Benton, 23 (9 boys and 14 girls) ; North Shields, 11 (4 boys and 7 girls) ; Gateshead, 9 (3 boys and 6 girls) ; Whitley Bay, 7 boys ; Blyth, 3 boys ; Wallsend, 3 boys ; Tynemouth, 3 boys ; Killingworth, 2 boys ; Whickham, 2 boys.

Girls also came from various places extending from Acklington to Annfield Plain and west to Prudhoe, but their numbers, except as quoted above, are not given in detail.

No records have been kept as to the subsequent careers of the pupils. A few of the boys proceed to the University and prepare for professional life, but the majority go into commercial offices, or take up engineering. A very small proportion of the elder girls gain scholarships at the Durham College of Science, and a few take up teaching, either in public elementary schools or as cookery teachers. A few enter the Post Office, or take up shorthand and type-writing and enter business offices. The greater proportion of the girls, however, remain at home after leaving school.

The staff of the boys' school consists of the Headmaster (Mr. F. W. Brewer, M.A.) and eight assistant masters exclusively attached to the school, and one visiting teacher for gymnastics. The Headmaster and three of the assistant masters are graduates and one (in addition to the Headmaster) is registered in Column B. of the Teachers' Register.

The staff of the girls' school consists of the Headmistress (Miss S. E. Dobson, L.L.A.) and seven assistant teachers exclusively attached to the school. Of the assistant mistresses three are graduates. One has the L.L.A. diploma and two have Cambridge Higher Local Certificates. One holds the Durham Teacher's Diploma, and one has almost completed the course for the same. Only one (besides the Headmistress) is registered in Column B, but two are qualified for registration, and one will be so qualified after a short further residence in a recognised school.

The average salary of the assistant masters in the boys' school is £119 7s. 6d., the highest being £160 and the lowest £100. The average number of teaching hours, per week, is 27·25.* The actual salaries at present received by the assistant mistresses are not given,

* See note at end of chapter, page 33.

but, instead of this, the minimum and maximum possible in each case under the scale in force in the school. The average salary, supposing all to be at the maximum, is only £94 5s. 8d., the highest being £120 and the lowest £80. The average number of teaching hours, per week, in the case of the assistant mistresses is 21.57.*

The fees are the same in the two schools, viz.: for pupils under eleven, £3 18s. 0d. per annum; for those over eleven, £4 19s. 0d. There are no extra subjects, but a charge of 3/- is made for stationery each term, in the case of the boys; and the boys can join the gymnasium class on the payment of the fee 5/- a term.

The schools are periodically examined by the Durham University Schools Examination Board and pupils are also sent in for the Cambridge Local Examinations.

There are maintained at the schools, thirty First Class Foundation Scholarships, entitling the holders to exemption from tuition fees, and to the payment of £3 per year, to be applied at the discretion of the Governors, to the benefit of the scholar; and thirty Second Class Foundation Scholarships, entitling the holders to exemption from tuition fees only. Twenty scholarships of each class are awarded to boys, and the remainder to girls. One half of each class are awarded on the results of the entrance examinations, to candidates who have previously been for three years at one of the public elementary schools in the Newcastle school district, in which religious instruction is given in accordance with the doctrines of the Church of England, or, in the absence of candidates of sufficient merit from such schools, at any public elementary schools in the Newcastle school district. The other half are awarded to pupils already in the schools, on the results of the school examinations.

Exhibitions of the yearly value of not more than £20, and tenable for not more than three years, at any approved place of higher education, may be awarded at the discretion of the Governors.

There is a small playground attached to the boys' school, but neither school possesses any playing field or ground for athletics, and the boys play their games on the Town Moor. They are keen about cricket, but the need for a school playing field is felt. Swimming is taught to the boys once a week during the summer months at the public baths. In the girls' school there is a magazine club for Forms V. and VI., and a flower festival is held each year, when the girls elect their own Queen and send offerings to various hospitals.

* See note at end of chapter, page 33.

(f) St. Cuthbert's Grammar School.

This school plays an important part in meeting the needs of the large Roman Catholic population of Newcastle and its neighbourhood. The Headmaster, Father Mann, combines the labours of a learned investigator with the responsible duties incidental to the headship of a day and boarding school. He is labouring to raise the intellectual level of the institution committed to his care and attaches special importance to strengthening its curriculum on the side of the Humanities.

The school was founded in 1881 in Westmoreland Road and transferred to its present site in Bath Lane in 1883. It is a Roman Catholic School, but the religious instruction is usually given at the beginning or end of the morning, and non-catholics need not be present at it. There are no endowments. The school is recognised by the Board of Education as a Secondary Day School, and is what was known until recently as a Division A school. In 1902-3 the Government Grant amounted to £297 12s. 6d. on 81 pupils. The school also receives £250 per year from the Newcastle City Council, and £28 6s. 8d. from the Durham County Council. The Northumberland County Council also made a grant to the school for the instruction of pupil teachers from the county area, who attended pupil teacher classes on Saturday mornings; but these classes have now been transferred to the Roman Catholic pupil teacher centre at the Convent of the Sacred Heart at Gosforth.

The building, which has been in part adapted from its former use as a brewery, includes a main room and four class rooms, chemical and physical laboratories, and a wood-work room. There is no gymnasium, but gymnastic appliances are fitted both inside and outside the school.

The course of study comprises religious knowledge, English language and literature, including history and geography, Latin, Greek, French, mathematics, physics, chemistry, woodwork, drawing, and, in the two lowest forms, writing and drill.

The school will accommodate 170 pupils and it is possible for 45 of these to be boarded. The number at present in this school is 146 (104 day pupils and 42 boarders). The minimum age at entrance is eight, and the average 12·3. In the summer term, 1904, 26 of the boys (or 17·81 per cent.) were under twelve years of age; 96 (or 65·75 per cent.) were between twelve and sixteen;

and 24 (or 16·44 per cent.) were over sixteen. Twenty-four (or 16·44 per cent.) had been in the school three years or over, of whom six had been there six or more years. All the pupils, with the exception of eight from private schools and a few from other secondary schools or straight for home, came from the public elementary schools. About 8 per cent. of the boys go on from the school to the Universities or other places of higher education; 10 per cent. enter various professions (the church, law, medicine, teaching, dentistry, veterinary surgery); 40 per cent. go into merchants' offices; 25 per cent. take up engineering or other apprenticeships; 4 per cent. enter banks or insurance offices; 5 per cent. go into retail trade; 4 per cent. take up agriculture; and 2 per cent. enter manufacturing industries. The after career of 2 per cent. is not given.

In November, 1903, 42 pupils were coming in daily to the school from outside the city boundaries, the principal district from which they were drawn being Tyneside.

The staff consists of the Headmaster (the Rev. Horace K. Mann) and six assistant teachers exclusively attached to the school, and one visiting teacher for science. Two of the assistant teachers are graduates; one (in addition to the Headmaster) is registered in Column B and one in Column A of the Teachers' Register. One of the non-graduate masters is leaving, and his place is to be filled by a resident B.A.

The average salary of the assistant masters is £87 3s. 4d.; the highest being £140, and the lowest £40; but three of them are resident, and adding £40 a year to the salary received by each of these, we get an average of £107 3s. 4d., the highest being still £140 and the lowest £80. The Headmaster's salary is only £140. The average number of teaching hours per week for the assistant masters is 22·16. Two of them have as much as 28 hours teaching a week.*

The fee for day pupils is £6 6s. a year, for boarders £35. Classics, Music, and German are extras—Classics £2 2s. a year, Music £4, and German according to the numbers taking it.

The school is inspected by the Board of Education, and periodically examined by the Durham University. Pupils are also prepared for the Matriculation Examination of London University. There are no scholarships attached to the school, but, in virtue of the grant received from the City Council, the Governors grant a certain number of free, or partially free, studentships.

* See note at end of chapter, page 33.

There is a playground belonging to the school, in which football, cricket, and tennis are played, according to the season. The Headmaster attaches great importance to school games.

(g) *St. Anne's School.*

The Sisters of Mercy who are in charge of this school merit the thanks of the community for their affectionate care of the girls committed to their charge, but the work of the school is not really secondary in its character, and it would be unfair to apply to it the intellectual tests appropriate to a secondary school.

The school was started in 1860 in Westgate Road. The present school, consisting of a main room, two class-rooms, and two music rooms, was built in 1878, and the pupils transferred to it in 1879. It forms part of the building of the convent. The latter has a pleasant garden, and stands on high ground in the eastern part of central Newcastle. The children have a large playground. It is a Roman Catholic school, but there is no interference with the religion of children of other creeds. There are no endowments.

The curriculum comprises:—Religious knowledge; English language and literature; history and geography; French; vocal and instrumental music; drawing; writing; needlework and drill; and in the highest form, Latin, natural science, and domestic economy.

There is accommodation for 150 pupils, and the number in the school in July, 1904, was 90, all day pupils. This number includes 11 little boys. The minimum age at entrance is four years and the average ten. In the summer term 1904, 51 (or 56·66 per cent.) were under twelve years of age; 37 (or 41·11 per cent.) were between twelve and sixteen, while two were over sixteen. 36 (or 40 per cent.) had been in the school three years or over, and of these, four had been there for six years or more. 31 (or 34·44 per cent.) of the pupils had come to the school from public elementary schools.

In November, 1903, there were thirteen girls in the school, who came in daily from outside the City boundaries. The principal districts from which they were drawn being, North Shields, Gateshead, *Walker, Blaydon and Prudhoe.

Many of the girls on leaving enter the Post Office or become pupil teachers.

* Now included in the City.

The staff consists of the Headmistress (Miss Eleanor Charlton) and seven assistant mistresses exclusively attached to the school. There are no visiting teachers. One of the teachers is a graduate of the Royal University of Ireland, and three, including the Headmistress, hold Elementary School Teachers' Certificates. None of them are registered in Column B of the Teachers' Register. The average salary of the assistant mistresses is £77 2s. 10d., the highest being £100, and the lowest £50. The salary of the Headmistress is £120. The average number of teaching hours per week (including the Headmistress, who teaches for 28 hours) is 24½.*

The fees are—for the kindergarten, £2 5s. per annum; for the junior school, £3 3s., and for the senior school, £4 10s. Instrumental music, singing, and painting are charged for as extras. There are no scholarships attached to the school. It is not inspected by any outside authority, but is examined periodically by some of the Governing Body. Pupils are also prepared for the examinations of the Incorporated Society of Musicians, and for the Art Examinations of the Board of Education.

(h) Elswick Institute Day Classes.

The Elswick Institute is connected with the Elswick Works (Sir W. G. Armstrong, Whitworth, & Co. Ltd.), and is supported by subscriptions from the workmen and donations from the firm. The day classes are free to the children of all those who are engaged at the Elswick Works, but other children pay 3d. a week. No religious conditions are attached to the classes. Application has not been made for recognition as a secondary day school under the Board of Education, but grants have been earned for science and art classes, the amount received in 1903 being £122 19s. 9d.

In addition to grants from the Board of Education, the institute receives aid from the City Council (£360 a year) and from the Northumberland County Council (£100). The workmen's School Fund amounts to about another £360, and the contributions from the firm, including donations from the Directors for special prizes, to about £80. All these amounts are shared by the day and evening classes. The staff of the day classes consists of the Headmaster (Mr. Robert Wills, B.Sc.), who is in charge of the whole institution, and two assistant masters, all of whom are paid fixed salaries for day and evening work combined. The number of pupils in the

* See note at end of chapter, page 33.

day classes in the session 1903-4 was 87 (41 boys and 46 girls). They all come from the public elementary schools, and must have passed Standard VI. before they are eligible to enter the classes. The minimum age of entry is twelve, and the average fourteen years. The great majority of the pupils afterwards enter the Elswick workshops or offices, but a few become architects, teachers, farmers, shopmen, etc. The course of study has been arranged after consultation with Elswick managers and foremen, and its special aim is to enable the pupils to enter with advantage upon their work in the various shops and offices of the works, as well as to prepare them for the evening classes which they almost all attend later on during their apprenticeship. It includes mathematics, physics, chemistry, drawing (including plane and solid geometry, freehand, and machine drawing) and a little English language and literature and writing.



NOTE.—It should be remembered that the time during which he is actually employed in teaching is only a part of that which a teacher must give to the discharge of his duties. The hours devoted to private study, preparation of work and correction of exercises are all additional. The intellectual efficiency of a school largely depends on the amount of time given by the teachers to the preparation of lessons. Moreover, the influence which the school exerts upon the character of its pupils is strengthened by the readiness of the teachers to devote much of their leisure to sharing in the out of school interests of the scholars.

CHAPTER IV.

RECOMMENDATIONS AND SUGGESTIONS.

In this chapter I shall submit for the consideration of the Education Committee a number of recommendations and suggestions for the improvement of Secondary and Higher Education in Newcastle-upon-Tyne.

1.—The need for Higher Elementary Schools.

In a well-ordered system suitable to the needs of a populous and progressive city, there are required three types of school-training above the level of the work done in the "standards" of the ordinary elementary schools. Of these types, the most advanced is designed for those pupils, whether boys or girls, who will remain at school until they are eighteen or nineteen years of age. A second and intermediate form of school is adjusted to the needs of those who will leave at sixteen or seventeen, while the third is specially planned to serve the purposes of those who can remain at school until they are fifteen, but must then embark upon the duties of practical life. The first of these types is the Higher Secondary School; the second, the Middle Secondary; and the third, the Higher Elementary.

For the third of these needs, but scant provision has hitherto been made in England. A more vigorous attempt, however, is

being made in Scotland to develop a practical and intellectually stimulating form of higher elementary education. My inquiry has led me to the conclusion that elementary education in Newcastle is ripe for development upon somewhat similar lines. I would, therefore, suggest that steps be taken to establish two well equipped and intellectually efficient Higher Elementary Schools, one at the East and the other at the West End of the City.

The striking fact that in October, 1904, there were in the Council Schools of Newcastle as many as 453 pupils who had already passed through Standard VII., proves that there is a demand for a more highly organised provision of higher elementary education than at present exists. It is true that this number would show a gradual though marked decline in the course of the school year, but a considerable proportion of the pupils in question remain till its close. This tendency to prolong the period of school life is as significant as it is satisfactory. We are witnessing in this country the growth of a strong popular movement, the outcome of an increasing keenness among the industrial classes to secure for their children improved educational facilities with a view to their better equipment for success in life. In one form or another, this movement of opinion is at the present time characteristic of vigorous and progressive communities all over the world. That it should now be asserting itself in Newcastle is in exact accordance with what is observed elsewhere.

One of the chief needs is for a carefully planned course of instruction, covering the three years from twelve to fifteen years of age, and so designed and carried out as to stimulate the intellectual powers, to widen the mental outlook, to cultivate the sympathies, and to impart those kinds of knowledge which will be serviceable to the pupils in their practical experience of life. It would be a grave error to make such a course narrowly utilitarian. But hardly less serious would be the mistake of offering in place of it a mere torso of a very different kind of curriculum, viz., one which requires a much longer period of school life for its adequate accomplishment, and which is primarily designed for the more literary or professional callings. Higher elementary education from twelve to fifteen is a thing which can stand on its own merits, which needs to work out its own ideal, and which has a right to claim an independent existence apart from the earlier years of a secondary school course, though the latter is to some extent, though not wholly, parallel with it in point of the ages of the pupils receiving it. The distinction

between the two does not lie in the presence or absence of the elevating and inspiring influence of the "Humanities." Both the higher elementary and the secondary curriculum should be in their measure humane. Both, in Professor Bosanquet's words, should endeavour to cultivate, so far as may be in minds so young, a "habit of mind instinct with purpose, cognisant of a tendency and connexion in human achievement, able and industrious in discerning great from trivial." But the higher elementary school has to remember that, for the great majority of its pupils, school days will come to an end at fifteen years of age, and that, therefore, the last year of its course should be so planned, that parts of it, if the expression is permissible, will hook on to the practical duties of life.

To achieve this purpose, the higher elementary school course should be on the following lines:—In the first two years (12–14) the instruction should be of a general character. The central feature of it should be good teaching of the mother tongue, with the object of training the children to express themselves clearly, accurately and sensibly. An effort should be made to give them a love for good literature, and to encourage them to read for themselves. Moreover, pains should be taken to develop in them a sense of civic and national duty. The curriculum should also include geography, which would have been begun earlier with a study of the home district; nature study, which might in part be connected with the teaching of drawing; practical physics; elementary mathematics; handicraft exercises; class singing and carefully graded physical training. Except for boys intending to take the industrial course mentioned below, who would receive manual training in the hours otherwise assigned to the foreign language, the course should include French, taught as far as possible in the language itself, but with careful regard to grammatical accuracy. Such teaching would give the pupils a better understanding of their own language through the study of another, and would widen their intellectual outlook and sympathies by helping them to appreciate the national life and ideals of a great foreign people.

At the end of the two years' general course the plan of studies would be divided into several branches, though these would not be so sharply divided as to prevent the pupils in the different sections from having some of their lessons in common. All the branches should include instruction in:—(1) The laws of health; (2) class-singing; and (3) physical training.

The first of the alternative courses in the third year would be a continuation of the general course mentioned above. This course would be especially suitable for those intending to be pupil teachers.

The second would be an industrial course and for boys only. Its characteristic feature would be the training of boys in subjects, which would prepare them for efficiency and success in the constructive trades. Stress would be laid upon practical arithmetic and geometry. The elements of mechanics would be studied, and a sufficient amount of time would be devoted weekly to manual training through wookwork and ironwork. But the course should not be narrowed down to specialised training in handicraft. It should also aim at carrying forward the general training in English subjects to a further point than had been previously reached.*

The third course would be, in a broad sense, commercial in its character. One of its main objects would be to impart a thorough understanding of the principles of arithmetic, and to give expertness in making calculations. Stress should be laid upon systematic exercises in handwriting, with a view of securing accuracy, legibility, and speed. The principles of book-keeping should be taught and illustrated by the keeping of accounts in simple form. The purpose of the commoner commercial documents should be explained. But the course should not be allowed to degenerate into an attempt prematurely to cram up the technicalities of business routine. Those are best learnt in the shop or office. What the school can rightly do, is to prepare its pupils to approach their subsequent duties with intelligence, and with a quick appreciation of their meaning and their purpose in commercial organisation. A good general education, with a practical trend in it, is what will best secure this habit of mind. Therefore the liberal studies should not be neglected in the commercial course. The pupils should be helped to realise that human relationships are the basis of all commercial intercourse. The study of French, begun during the first two years, should be continued, and geography should form an important element in the course.

The fourth course, which would be for girls only, would have as its main feature training in the domestic arts. Special stress should be laid upon the teaching of hygiene in its application to the

* In this connexion, I venture to call the attention of the Committee to what appears to be the insufficient provision at present made for manual training in connexion with the ordinary elementary schools in the City. The famous Newcastle adage "By hammer and hand, All arts do stand." has an educational as well as an industrial significance.

health of the home. The course would include instruction in cookery, needlework (including mending, darning and cutting-out), the care of rooms, laundry work, marketing and the keeping of household accounts. Instruction should also be given in the care and feeding of infants. But importance should be attached to retaining in the course a considerable measure of literary instruction with the special purpose of widening the intellectual outlook of the girls, and of developing interests which would lead them to make a wise use of their leisure.

The classes in a higher elementary school should be small, and should in no case exceed thirty. Some of the teachers should have received their education in secondary schools. There should be organised school games for both boys and girls with a view to cultivating *esprit de corps* and willingness to co-operate for a common object.

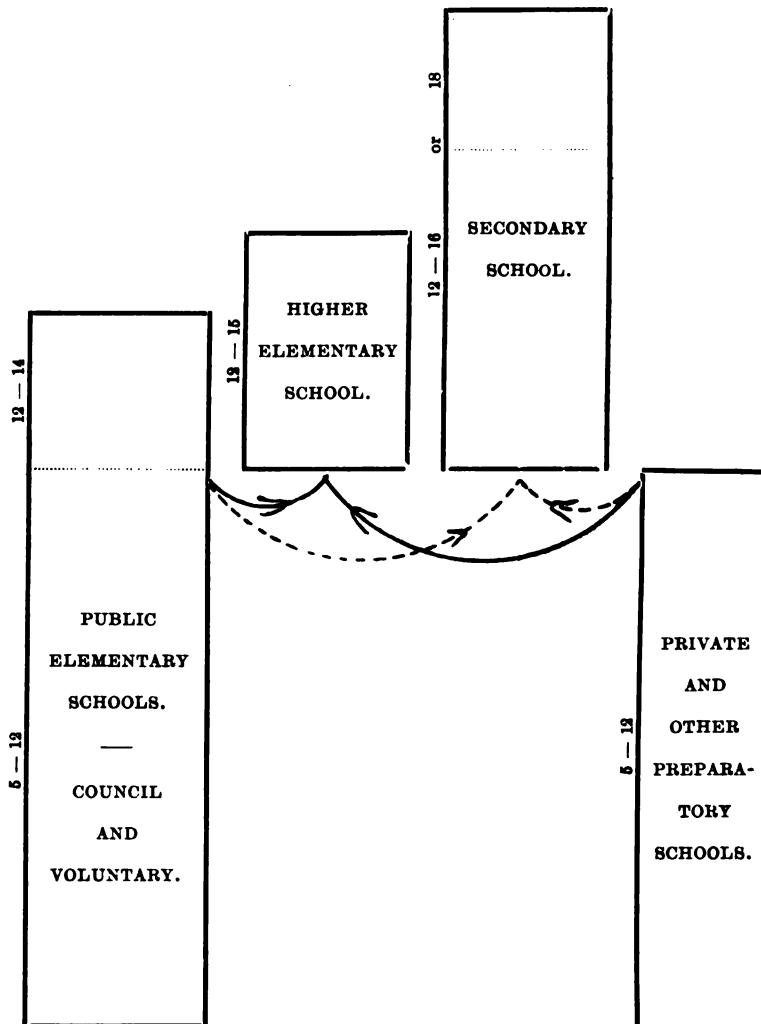
The following diagrams show (1) the plan of studies suggested for the higher elementary schools, and (2) the connexion of the public elementary schools and of the private and other preparatory schools with the higher elementary school on the one hand and with the secondary school on the other :—

(A) SUGGESTED PLAN OF HIGHER ELEMENTARY SCHOOL CURRICULUM.

14—15	General Course.	Industrial Course (Boys only).	Commercial Course.	Domestic Course (Girls only).
13—14	General Course.			
12—13	General Course.			

(B) DIAGRAM SHOWING THE CONNEXION BETWEEN PUBLIC
ELEMENTARY AND PREPARATORY SCHOOLS AND

- (i.) the Higher Elementary School (12-15) and
(ii.) the Secondary School (12-16 or upwards).



In carrying out the plan suggested above, a technical difficulty would arise from the fact that in its present form the higher elementary school minute of the Board of Education contemplates the tranference of children from the elementary to the higher

elementary school at eleven years of age or even earlier, and consequently requires a four years' course. But the educational, financial and administrative arguments in favour of leaving the children in the elementary schools till twelve years of age are so strong that it is permissible to hope for a modification in the existing minute of the Board.*

In providing higher elementary education, great care should be taken to secure thoroughly competent teachers—men and women who would throw themselves with zeal into the work and who would grapple successfully with the difficulties incidental to any new educational undertaking. I therefore estimate the annual cost of maintaining such a higher elementary school as is suggested above (apart from interest on expenditure on site and buildings) at from £8 to £10 per head. Assuming that the Board of Education allowed, in respect of a three years' higher elementary school course extending from twelve to fifteen, nothing more than the grants at present paid in respect of the first three years of the course, beginning at eleven years of age, the Government grant on the higher scale and including the fee grant would amount on the average to £2 19s. per head. This would leave a net cost of from about £5 to £7 per head chargeable to the rates.‡

Especially if it were accompanied by a reduction in the size of the classes in the ordinary elementary schools, (a reform which, though costly, would greatly enhance the value of the work done

* Since this was written the Board of Education has issued new regulations for Higher Elementary Schools. With respect to age limit and general scope of curriculum, the new regulations are in accord with the suggestions made above. Unfortunately, however, the grants now offered are far from adequate in view of the real cost of the education which, if they are to be efficient, Higher Elementary Schools should give.

‡ The new regulations of the Board of Education (June, 1905) reduce the amount of grant payable to Higher Elementary Schools. The average Government Grant for the three years of the Higher Elementary School course now amounts, including fee grant, to £2 15s. 0d. per head. It would be for the Committee to consider whether the higher elementary schools should be free, or whether a small weekly fee—of say 6d.—should be charged. There should in any case be an entrance examination, and only those children should be admitted to the higher elementary schools who gave evidence of their ability to profit by the course. If, with the permission of the Board of Education, it were decided to charge a small weekly fee, a considerable proportion of the places—say from 15 to 25 per cent.—should be made free. Allowing for the higher number of free places and reckoning the school year at forty-four weeks, the receipts from fees at 6d. would lessen the cost to rates by 16s. 6d. per head per annum. Some indication as to the willingness of the parents to pay a small weekly fee is offered by the fact that they make no objection to paying the fees (13s. and 25s. respectively) for admission to the University Preliminary and Junior Local Examinations which are taken by many of the pupils in the ex-standard classes in several of the Newcastle elementary schools at the present time.

in them), the establishment of two higher elementary schools on the lines suggested above would, in my judgment, be a boon to Newcastle. The higher elementary schools would not drain away all the children of intellectual power from the ordinary schools, and those who did leave for the higher elementary course would not do so till twelve years of age, below which limit some of the finest work can be done in an elementary school. Moreover a skilfully planned higher elementary course would be more beneficial to many of the children than much of the work done at present in the ex-standard classes in preparation for the University Preliminary and Junior Local Examinations, though the energy which the teachers throw into their work in those classes calls for cordial praise.

2.—*The Middle Secondary Schools.*

Under this head, reference will be made to the Rutherford College Secondary Day School, to Allan's Endowed Schools for boys and girls, to St. Cuthbert's Grammar School, to St. Anne's School and to the Day Classes at the Elswick Institute.

The middle secondary school should furnish a non-specialised course of study beginning at twelve years of age at latest and ending at sixteen years of age at earliest. Such schools are especially intended for those who propose to take up apprenticeships or to enter upon commercial life at sixteen years of age or a little later. They can also provide a training well fitted to the needs of boys and girls intending to become teachers in elementary schools. It is of pressing national importance that the middle secondary schools should be intellectually vigorous. One of the weaknesses of England as compared with Germany, Holland and Switzerland lies in respect of this type of education. On the intellectual side it is highly desirable that these schools should not over-specialise in science to the neglect of the humanities. On the physical side they should make careful provision for the training of the bodily powers. On the ethical side they should develop *esprit de corps* and the sense of corporate responsibility for the common welfare.

(a) Rutherford College Secondary Day School.

It is unnecessary for me to dwell upon the important service which the Rutherford College Secondary Day School has rendered to education in Newcastle and neighbourhood. The value of those services constitute a strong claim upon the support of the City and

of the neighboring counties. It will be seen from the following paragraphs that the school needs certain structural and other improvements in order to attain the standard of efficiency which in present circumstances an important secondary school may rightly be required to reach.

1. The present accommodation in the buildings of Rutherford College is inadequate for the various activities of its day and evening departments as they are now organised. More class rooms are required. The inspectors of the Board of Education recommend the provision of an advanced physical laboratory for the day school. By the erection of a new building alongside of the present one, and by the transference to it of the art school and physical laboratory, room would be found in the main building for eight new class rooms. There is also need for a gymnasium on the ground floor. As the building is shared for the most part by the day and evening classes, the question of accommodation is indirectly affected by the fact that there ought to be some rooms entirely set apart for certain branches of technological work, viz., for machine drawing, building construction, house painting and decorating, and for naval architecture. These rooms ought not to be used for day school purposes. To do the best technological work in the subjects named above, there should be special rooms devoted to the purpose in order to provide ample accommodation for the models and materials used.

2. The present playground area is insufficient for the needs of both the boys and the girls in the day school, though, of the two, the girls have the larger space, because they can use the old bowling green.

3. The assistant masters' room is at present little more than a cloak room. It ought to be larger and better furnished, so as to provide a proper meeting place for the use of the staff. The women teachers have no common room which is wholly devoted to their use. They avail themselves of a room which is partially used for council meetings, and which is furnished as a class room. Well appointed teachers' common rooms are an indispensable part of the equipment of a good secondary school.

4. There should be more cloak room accommodation for the boys. In each of the girls' cloak rooms there is a steam battery, but no proper drying apparatus for damp clothes. In view of the fact that so many of the pupils come in from a distance, this defect should receive attention.

5. A cardinal need of the day school, if it continues to be organised on co-educational lines, is that of a lady with experience of work in a good secondary school, who would have special oversight of the girls.

6. The staff of teachers should be increased, as at present they have not sufficient leisure for the correction of written exercises. The salaries should advance by annual increments up to a reasonable maximum in proportion to length of efficient service.

7. The numbers in the larger classes should be reduced. No class should consist of more than thirty pupils.

8. The school should be provided with a good general reference library. There are, indeed, departmental libraries in the biological and chemical laboratories, but the school has no general library and at time of my visit did not possess an encyclopædia. The masters who teach the classes in the second year of the course here formed a collection of historical novels bearing upon the period studied in the class, and the books are in brisk request. I was glad to hear that steps were being taken to form a small collection of books on geographical subjects. The school lacks a collection of portraits and of other pictures for use in the teaching of history.

9. The scientific equipment of the school is strong, but I was informed that another screw-cutting lathe is needed in the workshop.

10. The dining room in the basement is not inviting. Comparatively few pupils stay in the school building for dinner. The corporate life of the school would be strengthened if more remained for a common midday meal. The present division in the dining room might be removed and a dinner served for the boys in the present cookery room and for the girls (unless they are transferred, as suggested below, to new premises) in the present dining room when thus enlarged by the removal of the partition. Care should be taken to have the meal served in an orderly manner, and a master and mistress should always be present.

11. As all these necessary changes will entail expenditure, I have been brought to the conclusion that the whole College, including both the day school and the evening classes, should be taken over by the Education Committee. The Council of the College is in accord with this view, and has expressed its willingness to hand over its trust to the city.

12. A further conclusion to which I have been led by my inspection of the school and by my investigation into the educational needs of the city, is that it will be found expedient to convert the

secondary day school into two separate schools, one for boys and one for girls. The boys would remain in the present building. Accommodation should be found for the girls' school elsewhere. When the new Grammar School buildings are opened in Jesmond, the buildings now used by the Grammar School might be converted into the Rutherford Secondary School for Girls.† The girls' school thus formed should be placed under a headmistress. The Rutherford Secondary School for Boys would be under a headmaster.

I believe that such a re-organisation of the school would be beneficial both to its tone and to its intellectual interests.

A further advantage would lie in the fact that the transference of the girls might render it unnecessary at present greatly to extend the buildings of the College, but I take this opportunity of drawing attention to the strong recommendation of the College Council that it would be wise for the local authority to hold such land in the neighbourhood as is likely to be required for the future extension of the buildings. The situation of the College is most convenient for those coming by train or tram from all quarters of the city and neighbourhood.

13. When the day school is re-organised it would be well to consider whether more responsibility for school discipline could not be thrown upon the highest class of boys and of girls. And the corporate spirit of the school might be strengthened by holding each morning in the large hall what in America are called 'opening exercises.' At present the large hall is not furnished for such a purpose and is used as a classroom.

14. The removal of the girls to another building would leave available for the boys' use the whole of the playground which, on one side, is bounded by one of the few remaining lengths of the ancient city wall.

15. If the schools are not divided, a lady, with experience of work in a good secondary school, should be appointed to have special oversight of the girls. She should have plenty of time free from actual teaching in order to be able to see a good deal of the girls who did not happen to be in her own class. She should have a room of her own. She should have social gifts, be musical and a good organiser, and be interested in school games. Such a woman would be able to do a great work among the girls in the school.

† In making this suggestion, however, I do not wish to appear to prejudice the question whether a more suitable use for the present Grammar School buildings might not be their employment for the purposes of one of the proposed higher elementary schools.

16. There are Durham and Northumberland County Scholars in the school. Those County Authorities, in order to satisfy themselves that their scholars are industrious, require them to pass certain local examinations. Perhaps I may be permitted to say that my inquiry led me to believe that, so long as the Inspectors of the Board of Education attest the general efficiency of the work done in the school, a sufficient guarantee of the industry of the individual scholars would be secured by requiring the school authorities to furnish at regular intervals a report upon the work of each scholar. These reports should in each case be drawn up by the assistant teachers concerned and countersigned by the Headmaster or Headmistress of the school.

17. If steps are taken, as opportunity offers, to strengthen the teaching staff and to provide for the remuneration of the teachers on the scale which will be found necessary in future to secure and retain the grade of ability and of attainment required in a secondary school, the maintenance cost of the two schools will gradually rise to about £15 per head in the boys' school and to about £13 per head in the girls' school. Towards this outlay (which would not include expenditure on the provision of buildings, or interest on and repayment of capital), there would, on the average, be an annual Government Grant of about £3 10s. per head in respect of those pupils, normally between twelve and sixteen years of age, who were going through the four years' course. The ordinary fee at present is £4 10s. a year, exclusive of books. Therefore if the fee were to remain at its present figure, it would ultimately be necessary for the local authorities concerned to find about £7 per head in the case of the boys between twelve and sixteen years of age and about £5 per head in the case of the girls, towards the annual maintenance of the school. In the case of scholars paying no tuition fee, the cost would ultimately be about £11 10s. and £9 10s. respectively.

I would submit that it is in the public interest, that the Rutherford Secondary Schools for boys and girls should offer a thoroughly sound education at a fee within the reach of parents of modest means. But the provision of a really sound secondary education necessarily entails large outlay. Hitherto, however, in England, we have frequently made the mistake of allowing the education given in the secondary schools to be of inferior quality. But an intellectually inferior education, even though the fee paid for it be small, is a bad bargain. Will it not be wiser, even if this

should mean for a time providing less secondary education, to secure its being at all events thoroughly efficient? If this be done, (and I am persuaded that it would be found, in the long run, the wiser course), will it not be reasonable to expect parents to pay a little more for the excellent advantages thus placed within the reach of their children? Seeing that a boy or girl who makes really good use of a sound education derives great personal advantage from it, would it not be reasonable to charge, say, £5 or £6 a year for a course of instruction, which would really cost (and that apart from interest on capital outlay) about £13 or £15. Those fees, together with the average Government grant, would ultimately leave an annual net maintenance cost of £4 10s. and £5 10s. per head, in the case of the girls' school and boys' school respectively, to be met out of the rates. At first the cost would be less, but to that figure it would gradually rise.

In the case of pupils who are children of non-ratepayers in the City and come in from outside the city area, it would seem just to meet, in part at any rate, the deficit on annual maintenance either by charging a higher fee than £6 or by arranging with the County Authorities concerned for an annual payment by way of composition for the benefit thus accruing to children resident outside Newcastle. It would be a great advantage to the County Authorities to have these efficient secondary schools within easy access of large parts of their respective areas, and it would be reasonable that they should make some contribution towards the cost of an arrangement which, while admittedly beneficial to Newcastle, would also incidentally relieve themselves of otherwise inevitable (or at any rate desirable) expenditure.†

18. If the schools are divided, I would suggest that a pupil teacher centre be organised at the top of each school, as each would furnish a valuable supply of recruits for the teaching profession.

(b) Allan's Endowed Schools.

1. It is urgently necessary that steps should be taken to relieve the congestion from which these schools are suffering. Both, and especially the girls' school, are doing good work in the teeth of

† Some years ago the County Council of Northumberland made a grant of £500 towards the equipment of the laboratory of the Rutherford College. At the time of my visit it made no grant to the day school, and had withdrawn its grant from the evening school. The Durham County Council makes a grant of £1 per annum in respect of each pupil from its area in attendance at the secondary school.

great difficulties. But both, and especially the girls' school, are hampered by the inadequacy of the accommodation. The excellent service which the schools are rendering to middle secondary education in Newcastle, entitles the teachers to early relief from the present conditions under which their work is done—conditions which cannot fail to be prejudicial to the intellectual interests of the pupils in the schools.

Greatly pleased as I was by the earnest spirit shown by the teachers, the sight of the overcrowded class rooms left a painful impression on my mind. I would suggest to the Governors that the boys be transferred to some new building and that the present school house be entirely devoted to the purposes of the girls' school. This will make it unnecessary to have two classes taught in one room at the same time. It will enable laboratory accommodation to be provided. It will make it possible to improve the lavatory accommodation. The two playgrounds could be thrown together and would then be fairly adequate for the girls alone.

I venture to express the hope that a way may be found of thus relieving the present congestion at an early date. The schools deserve to be promptly and liberally helped.

2. The salaries paid to the assistant teachers are considerably below the level which should obtain in a secondary school.

3. The laboratory accommodation is inadequate in the boys' school. In the girls' school there is none.

4. The girls have neither drill nor gymnastics, through lack of proper room for the purpose.

5. There is no drill in the boys' school, and only a part of the pupils join the gymnastic classes, for which an extra fee is charged.

6. Proper classification in the girls' school is rendered very difficult through lack of adequate accommodation.

7. Neither school has a library. Neither has an encyclopædia or other standard works of reference.

8. In view of the increase of income necessary to secure the efficiency of the schools, I would suggest that the Governors should consider the propriety of raising the fees (1) in the case of the boys' school to £6 a year, and (2) in the case of the girls' school to £5. This change, so far as the boys are concerned, would entail an amendment of Section 39 of the Scheme. When the accommodation is improved, application should be made for an annual Government grant under the Board of Education's Regulation for Secondary Schools.

9. I would suggest that when the schools are reorganised in separate buildings, a pupil teacher centre be formed in connexion with each of them. They will thus form a still more valuable part of the educational organization of the city.

10. Should the Governors see their way to remedying the present defects in the accommodation and in the course of instruction, it would be expedient to increase the grant made to the schools by the Education Committee. Half the grant made by the Education Committee might properly be paid in respect of the girls' school.

(c) St. Cuthbert's Grammar School.

1. The chief difficulty under which this school labours is lack of funds. At the time of my visit, the salary of not a single master (Headmaster included), reached £150 per annum. Yet some of the masters had served the school faithfully for twenty years. With larger resources at their disposal, the Governors would be able to increase the efficiency of the educational work which they have hitherto had to carry on under great difficulties. It is much to be feared that unless more adequate stipends are paid to assistant masters in secondary schools, it will be impossible to secure the services of the type of man needed for the work.

2. In view of the services which this school renders to the education of a considerable part of the population of the City, I venture to suggest that the Education Committee should take into consideration the desirability of increasing its annual grant in aid.

3. It would be desirable to establish a pupil teacher centre for boys in organic connexion with this school.

(d) St. Anne's School.

While feeling deep respect for the spirit in which this school is carried on, I regret that I cannot recommend that grants be made to it as a secondary school or that a pupil teacher centre be recognised in organic connexion with it. As stated on page 53 below, the school in connexion with the Convent of the Sacred Heart at Gosforth seems the most suitable place for a Roman Catholic pupil teacher centre for girls.

(e) The Day Classes at the Elswick Institute.

The intellectual vigour and educational skill of Mr. Robert Wills, who is in charge of these classes, must produce a favourable

impression upon all who inspect his work.* But the present accommodation, though well adapted for the evening classes for which it is primarily intended, is not suitable for the purposes of a secondary day school. The curriculum, indeed, meagre as it was at the time of my visit on the side of the humanities, might without very serious difficulty be improved, but the only available playground is a mere court not much more (if rough measurements taken at the time of my visit were correct) than twelve yards long and ten yards wide—a space which, of course, offers no proper facilities for organised school games. Though there were 46 girls in the classes (as compared with 41 boys) there was no woman teacher on the staff. The lavatory accommodation, though good, is inadequate for a larger school.

Taking all the circumstances into account, I have come to the conclusion that I cannot recommend the committee to give grants in aid to these day classes under the category of secondary education. But it is needless for me to add how high an opinion I have formed of the work done (under the same teachers) in the evening classes, or to explain that, in making the above recommendation, I am far from meaning to suggest that the grants made by the Education Committee to the Institute as a whole should be curtailed.

3.—The Higher Secondary Schools.

(a) The Royal Grammar School.

There is good reason to hope that a bright future awaits this school. At no distant date it will be transferred to new buildings, which, by the wisdom of the Governing Body, will be erected on a convenient site in Jesmond, with an attractive facade, well appointed classrooms and improved equipment. At present it suffers from being carried on in two different buildings, each in their measure inadequate and unsuitable, and separated from one another by a considerable distance. The change will be highly beneficial to the interests of the school. It will be more conveniently placed, with a view to the residence of the families from which it may hope to draw a great number of its most promising pupils. It will escape from surroundings which give a certain air of forlornness to its work. It will visibly make a new start. And it will gain a more commanding

* He is Headmaster of the whole Institute, the chief part of whose work lies in the evening classes.

position in the thoughts of the citizens of Newcastle, and of the wide neighbourhood of which it should be the chief centre for the higher secondary education of boys.

It would be well to consider the propriety of making yet another change when the time comes for the transference of the school to its new position. The present tuition fee is £9 a year, with £3 extra for Greek. The maximum fee permitted by the scheme is £14. In view of the great cost of providing higher secondary education on a plane of high intellectual efficiency, and of the position of the families from which the school may fairly expect to draw a majority of its pupils, it appears to me that it would be equitable and prudent to raise the fees to the maximum permitted by the scheme, and at the same time to rest content with nothing short of the highest excellence in the teaching and other educational opportunities provided. I would even go further and suggest an amendment of the scheme in order that a yet higher fee might be charged. The true ultimate cost of providing first rate secondary education, of the type which this school ought to furnish, will be found somewhat to exceed £20 a year. No lower figure will prove to be possible if steps are taken to place the position of the assistant masters on a satisfactory basis. And unless this is done without delay, the prospects of establishing a high level of excellence in our secondary day schools will be seriously impaired. Let us conjecture that under new conditions the Grammar School will increase its numbers to 350 boys. The endowment now available for general revenue is estimated at about £600, which would be less than £2 per head of such a number. That leaves at least £18 to be met from other sources of income. Perhaps, taking the school as a whole, about £3 per head would come in the form of Government Grants. The inference is that the fee should be £15—care being taken of course to maintain a sufficient number of scholarships which would give free tuition to boys of real promise.‡

With a brilliant staff and a well thought out curriculum, the school would quickly take a leading place in the higher secondary education of the North of England. Newcastle is virtually the metropolis of North-Eastern England, and its Grammar School

‡ It is to be hoped that ere long the endowment of the school may be substantially increased. This would, perhaps, enable the fee to be somewhat lower—but it should be remembered that the estimate of £20 for annual maintenance is under rather than over the mark, and that a good deal ought always to be done in the way of offering scholarships or reduction of fees.

should rank as high in the public estimation as does, for example, the Grammar School at Manchester.

It would be desirable to establish a few intermediate scholarships tenable in the school from sixteen to eighteen years of age by boys already in the school. For such scholarships provision is suggested elsewhere in this report. They would induce clever boys, who might otherwise leave school prematurely, to stay on for two additional years of school life.

The Headmaster is devoting much thought to the problem of making the curriculum thoroughly suitable to the needs of the boys in the school. He has for many years advocated the transference of the school to Jesmond, and is to be congratulated upon his good fortune in seeing his hopes about to be realised.

In the meantime the school deserves further help. It needs a good library of books of reference; the salaries of the assistants should be revised; the staff should be strengthened; and the headmaster should have some clerical assistance in view of the heavy correspondence and administrative business which devolve upon him. I would, therefore, suggest that the Committee should increase its present annual grant to £350.

(b) The Central High School for Girls (Girls' Public Day School Co.)
and

The Newcastle High School for Girls (Church Schools Co.).

With regard to these two excellent schools, I have only one recommendation to make in this report, viz:—That the Committee should attach to them leaving exhibitions (one to be awarded in each school yearly upon the result of the school examinations or otherwise), tenable for three years at a University or some other place of higher education approved by the Committee, and each of the annual value of £50. These exhibitions would be a great boon to the schools, and would confer an educational benefit of considerable value upon Newcastle.

The junior scholarships (12–16), and intermediate scholarships (16–18), offered by the Committee should be tenable at these schools. The first, subject to a certificate being received from the headmistress, that, after examination, she believes the scholar in question to be qualified to gain advantage from the course of instruction provided in the school, and, the second, on the

recommendation of the headmistress, regard of course being paid by her to the abilities of the girl to whom the scholarship was proposed to be awarded.

4.—The Private Schools.

The Private Secondary Schools in Newcastle are of various types and of very different grades of efficiency. Some are of high excellence, several do meritorious work, others again are an element of considerable weakness in the educational life of the City.

I would propose that all the private schools be invited to submit themselves to inspection at regular intervals by the inspectors of the Board of Education, or of some other approved authority, and that the Education Committee offer to defray the cost of such inspection. The latter should have regard to the sanitation of the premises and to the intellectual efficiency of the instruction. Those private schools whose educational fitness was thus attested by inspection might well be accorded certain privileges. Among such privileges would be the right of sending in candidates for the competition for the City Scholarships. At certain of the schools (for example at the Modern School) Junior City Scholarships might be made tenable, if the holder so preferred. Furthermore, I would suggest that the Education Committee should offer to lend to each recognised private school, the efficiency of which was regularly proved by inspection, a small reference library of standard works (standard dictionaries, encyclopædias, etc.), and a collection of maps and other educational apparatus. These books and apparatus would remain the property of the Committee and would be stamped with its mark, but would remain on deposit at the private school so long as its efficiency was maintained. At yearly intervals the loan collection should be checked from an inventory by an officer of the Committee, and each collection should be kept up-to-date and, as need arose, supplemented by fresh loans. Such an arrangement would, I am persuaded, do a good deal to help the private schools in their work, and would entail an expense small in proportion to the educational benefit secured.

Every recognised private secondary school should also find a place in the Educational Directory of the City, the annual issue of which is suggested on page 64.

5.—*The Training of Pupil Teachers.*

It may be estimated that about one hundred pupil teachers will be required annually for Newcastle-upon-Tyne. I would suggest that, in accordance with one of the plans authorised by the Regulations of the Board of Education, pupil teacher centres should be established in organic connexion with the following secondary schools:—Rutherford Secondary School for Boys, Rutherford Secondary School for Girls, Allan's Endowed School for Boys, Allan's Endowed School for Girls, and St. Cuthbert's Grammar School.

It would be well to allow Roman Catholic girl pupil teachers, who might so prefer, to attend the pupil teacher centre at the Convent of the Sacred Heart at Gosforth, provided that the efficiency of the centre is attested by the Board of Education.

But this provision of pupil teacher centres will not meet all the needs of the case. A contingent of pupil teachers will come from the new higher elementary schools, if, as is suggested in this report, two such schools are established in Newcastle. For the benefit of these pupil teachers it will be desirable to maintain the present pupil teacher centre, though doubtless on a smaller scale than at present. In the course of my inquiry I formed a very favourable impression of the influence exerted by Mr. Gaunt upon the pupil teacher centre under his charge, but it is possible that he may receive preferment to some educational post of even greater importance in the City, and in that case I think the Education Committee might well consider the advisability of placing a well qualified woman teacher in charge of the centre, which would be attended largely, though not entirely, by girl pupil teachers, and would be considerably reduced in numbers by the recognition of centres in connexion with the middle secondary schools. It would be expedient to choose for the post a woman who had received her education in a good secondary school, and who had subsequently had experience in the instruction of pupil teachers, and therefore understood the various problems which arise in their training.

Furthermore, as the higher elementary school course ends at fifteen years of age, while the pupil teacher course does not begin till sixteen, it would be necessary to attach to the pupil teacher centre, a preparatory class in which the intending pupil teachers would receive education on liberal lines, from fifteen to sixteen years

of age. The studies in the preparatory class should be carefully co-ordinated with those of the general section (third year) of the higher elementary school (see p. 37 above).

Into the question of the award of bursaries for pupil teachers it is unnecessary for me to enter in view of the arrangements already made by the Committee, but I would venture to raise the question whether it will be found necessary to continue to offer bursaries for girl pupil teachers.

The elementary schools to which the pupil teachers are sent for their professional training during their pupil teacherhood should be carefully selected for their excellence, and in view of the pedagogical skill of their head and assistant teachers. Both heads and assistants in the selected schools should receive an honorarium as an acknowledgment of the trouble taken by them in giving professional instruction to the pupil teachers. And, further, in view of the number of institutions to which the pupil teacher centres would be attached, it would be prudent to appoint an officer charged with the special duty of supervising the pupil teachers' practical work, and of forming a link of regular and confidential communication between the heads of the secondary and those of the selected elementary schools.

6.—Training Colleges and Certificate Classes.

In Newcastle and neighbourhood there are the following Training Colleges for Elementary School Teachers:—Two well-known Diocesan (residential) Colleges at Durham, St. Bede's for men and St. Hilda's for women; the British and Foreign School Society's Residential Training College for women at Darlington, an institution which enjoys a deservedly high repute in the educational world; and the flourishing Day Training College at the Armstrong College, which owes much to the energy and educational experience of Professor Mark Wright.

Thus for the North-East of England there are three residential and one day training college.

The Day Training College at the Armstrong College is licensed for 120 students, of whom, roughly speaking, half are men. The college rejects as many candidates as it accepts. The students in training constitute a majority of the Arts students at the Armstrong College.

An effort is being wisely made to develop hostels connected with the Day Training College. Should the suggestion, made elsewhere in this report, that an increased grant should be given by the City to the Armstrong College, meet with favourable consideration, it is to be hoped that part of the additional income thus furnished to the College might be utilised in placing the hostels upon a thoroughly satisfactory basis. Nothing will do more to strengthen the work of the Day Training College than a good hostel system. I hope that I shall not be thought to be passing beyond the limits of my present task if I venture, in this connexion, to draw the attention of the Education Authorities of the adjacent Counties to the advantage which might accrue to them if they were to assist in the establishment of the hostels on the understanding that a certain number of places should be reserved for students from the county area who might desire to enter the hostels and whose attainments reached the level rightly required of all successful candidates for admission.

It would probably conduce to the successful working of the day training college if a matriculation examination were instituted by the University of Durham.

For the benefit of teachers who desire to prepare themselves for the certificate examination without going to a training college, it would be well to form certificate classes; but it would be desirable to offer financial advantage, in respect of initial and maximum salary, to those who may incur the expense of a college training with its consequent postponement of salaried service.

7.—Scholarships.

With a view to the better co-ordination of different types of education in Newcastle, and to enabling boys and girls of promise to obtain the highest education which their ability deserves, I suggest to the Education Committee that it would be expedient to develop the scholarship system upon a more extensive plan than that at present in operation. Nothing, however, is to be gained by being too profuse in the offer of scholarships. To win one should be a real honour. The hope of winning one should be a spur to industry, to perseverance and to self-denial. It is a cruel kindness to help boys and girls to enter upon a course of education unsuited to their abilities and unlikely to lead them to a congenial career.

The scholarships should be in six groups: (1) junior scholarships tenable at secondary schools from twelve to sixteen years of

age; (2) intermediate scholarships tenable by pupils already in those schools, from sixteen to eighteen, in order that they may prolong their course of secondary education; (3) senior scholarships, or leaving exhibitions, tenable for three years by pupils from the secondary schools at a University or some other place of higher education; (4) technical, commercial and domestic economy scholarships; (5) evening class free studentships; and (6) art scholarships.

It will be observed that all the 600 boys and girls admitted to the proposed higher elementary schools would in effect be receiving a scholarship of considerable yearly value, as the cost of the education given in those schools would largely exceed the very modest fee suggested (and that for only 75 per cent. of the cases) as an alternative to absolutely free admission.

So far as the junior scholarships are concerned, it would probably be well to regard the annual award of forty (twenty for boys and twenty for girls) as an ample maximum, in view of the scholarships already provided in the City† Every scholar should receive (1) tuition free of cost for four years at the chosen secondary school, subject to satisfactory reports of his or her progress being annually received by the Education Committee from the school authorities in question, and (2) a yearly allowance of £1 5s. for the purchase of books. It would be well also for the Education Committee to have at their disposal a small annual sum, out of which to give maintenance allowances in addition to scholarships to boys and girls whose home circumstances were found, after private inquiry, to be such as to make it impossible for them otherwise to remain at the secondary school.

The junior scholarships should be awarded on open competition, but admission to the examination should be confined to pupils who were expressly recommended for the purpose by the Headmaster or Headmistress of the public elementary, or other, school from which they came. Pupils from private schools of recognised efficiency (as attested by regular inspection) should be admitted to the competition. The examination should be carefully planned on lines which would discourage "cramming." It should be partly a written examination, partly an oral. It is desirable that the examining committee should comprise teachers familiar with the work of the elementary and secondary schools of the City. So constituted it might serve as a consultative committee on questions of curriculum

† See Appendix C.

and of co-ordination of the studies in different types of schools. Much advantage would accrue from this expert co-operation between the elementary and secondary school teachers. In no other way would a better correlation of studies in the two types of schools be so quickly secured.

The intermediate and the senior scholarships should be awarded on internal school examinations, or by some other method approved by the Education Committee on the representation of the authorities of the school concerned.

One or two private schools—notably the Modern School—should be recognised as places when junior scholarships are tenable if the scholar so prefers.

8.—*The Armstrong College.*

The crown of the educational system of Newcastle is the Armstrong College, the intellectual distinction of whose staff and the scientific value of whose work are recognised in educational circles all over the world. It is unnecessary for me to enter in this report into any detailed description of the organisation and course of study of the College, or to describe its handsome and well situated buildings, now receiving ample yet necessary enlargement. It will be remembered how high a tribute was paid by the Treasury Commissioners, who visited the College in 1901, to the work of those departments of the College which have a special bearing upon the chief industries of the district—namely, the departments of engineering, of electrical engineering, of mining and of agriculture.† It is gratifying to observe the rapid growth of the College and the evident signs throughout North Eastern England of increasing appreciation of its work. Striking evidence of this increased measure of local interest is afforded by the fact that the proportion borne by the Parliamentary Grant to the local income of the College, which was 29·2 per cent. in 1902, had fallen to 19·5 per cent. in 1904. In the recent apportionment of the increased Treasury Grant to University Colleges, there has been assigned to the Armstrong College the sum of £3,000 for 1904-5, as compared with £1,800 in 1903-4, and to this

† I desire to record my admiration for the work which is being done at the School of Art at the Armstrong College under the charge of Mr. Hatton. The spirit and style of the work are alike most excellent. I venture to express the hope that in the approaching re-organisation of the educational resources of the City the utmost care will be taken to prevent the School of Art at the College from being inadvertently injured by developments in other directions.

increased grant an additional sum of £700 has been added in respect of the present year for the purchase of books, apparatus, instruments, etc.

But the grants received by the College are still far from being adequate to its needs. The cost of maintaining efficient University work is enormous. Especially heavy is it in a great centre of higher technological instruction on University lines. The College needs far more than it at present receives if it is to keep its costly equipment up to date, and to maintain an adequate staff of professors and other teachers in all the necessary faculties. In few centres is it so important to uphold a high level of teaching in the Humanities, including philosophy, as in the midst of a great industrial population. Every University College in England is working at a loss for every student it teaches. The Armstrong College is no exception to the rule. The College needs larger funds in order to pay more suitable salaries to its junior staff. It needs more equipment. It needs Research Fellowships. It needs to be so furnished with resources as to be able to seize the great opportunities which are opening out before it on all sides—opportunities which, under its distinguished Principal, it will grasp with high credit to Newcastle.

It is agreed that no small part of the industrial and commercial advance of the German Empire can be traced to the influence of its Universities and of its Technical High Schools. The most famous of German Universities—that at Berlin—was founded in order “to supply the loss of territory by intellectual effort.” All of them have borne their part in rendering remarkable intellectual assistance to German enterprise. Do we not need in England similarly concerted effort upon a farseeing plan? Is not the need for highly trained leaders of industry far greater now than at any earlier period in our history? Is it not expedient that we should be prudently bountiful in the aid which we give from central and local funds to these arsenals of brains?

The German development of higher education has not been accomplished without great pecuniary outlay. Baden, with a population of less than two millions, gave over £72,000 in 1902–3 to the Universities of Freiburg and Heidelberg. Hesse, with a population of a little over a million, gave in the same year a grant of £42,000 to the University of Giessen. The same farseeing munificence is being displayed in America, both by Governments and by wealthy individuals. Shall we in England lag behind?

There are signs on all hands that there is a determination on our part not to allow ourselves to be beaten through failure to develop our intellectual resources. The following table shows what various local authorities are doing to help their neighbouring or City Universities.

GRANTS MADE BY LOCAL AUTHORITIES TO UNIVERSITIES, 1905.

University.	Local Authority.	Annual Grants.	Special Grants.
LEEDS.....	Leeds City Council.....	£ 5,550	
	West Riding County Council	5,125	
	East " " "	505	
	Yorkshire Council for Agricultural Education representative of the East, North and West Riding County Councils.....	4,080	
LIVERPOOL....	Liverpool City Council	10,000	The Liverpool City Council gave a building and site valued at £30,000.
	Lancashire County Council.	1,000	
	Bootle County Borough Council	500	
	Birkenhead County Borough Council	500	
	Cheshire County Council ..	300	
BIRMINGHAM..		1d. rate about	
	Birmingham City Council..	6,000	
	Staffordshire County Co'cil.	500	
	Worcestershire County C'cil	500	
MANCHESTER..	Manchester City Council ..	4,000	
	Lancashire County Council.	1,000	
	Cheshire County Council ..	300	
	Salford County Borough C'il	300	
	Oldham " "	150	
	Bolton " "	100	
	Bury " "	100	
SHEFFIELD....	Sheffield County Borough Council.	1d. rate about 7,000	
		in addition to grant to Technical Dept. about 8,000*	
	West Riding County Co'cil.	2,320	

* This will be about the amount of the grant to the Technical Department for the present and for the next three years. It is made up of about £6,000 to Revenue Account and £2,000 to Capital Account for the provision of equipment and extensions to buildings.

I trust that I shall not appear to the Committee to be passing beyond the limits of my inquiry if I state that, in the course of the investigations which were undertaken at their request, I was deeply impressed by the value of the services which are being rendered by the Armstrong College to the civic, economic and educational

interests of Newcastle and of the adjoining counties, and still more deeply impressed by the magnitude of the work which could be accomplished by the College if it had larger funds at its command and ampler resources for its general maintenance. Were it possible for Newcastle to do as Sheffield has done and as Liverpool has done, and grant to the Armstrong College the yearly proceeds of a penny rate, I am persuaded that the grant would prove a most profitable investment.

And, further, besides giving the College the direct help of a larger annual grant, the City has it in its power greatly to enhance the efficiency of its work by improving the position, and the raising the intellectual calibre, of the secondary schools from which the College should draw an ever increasing number of its students.

A great man of letters, whose name is honourably connected with Newcastle, once said "The best thing that I can think of as happening to a young man is this: that he should have been educated at a day school in his own town; that he should have opportunities of following also the higher education in his own town; and that at the earliest convenient time he should be taught to earn his own living." Whatever may be said (and much may be justly urged) in favour of sending boys away for part of their training to a distant school or University, the above is the educational programme which should be open to every intelligent lad born in Newcastle.

9.—The Evening Classes.

In no city in which I have had the honour of conducting an educational inquiry have I been so favourably impressed by the work of the evening classes as in Newcastle. The earnestness of many of the students is deserving of the highest praise. And a special tribute is due to the work of the engineering apprentices, who form the backbone of the evening classes in the City. They show that they appreciate the facilities given by so many of the employers to those who regularly attend evening courses of instruction.

By the help of Mr. Richardson I learnt much about the evening school work in Newcastle, and would submit for the consideration of the Committee a few suggestions for its better co-ordination.

In the first place, it seems desirable that an increased grant should be given to the Elswick Institute, which is doing excellent work, and that, if the Rutherford College is taken over by the City, a somewhat larger sum than hitherto should be spent upon the

development of its evening work. But I would suggest that a Board of Technological Teachers be formed to act as a consultative committee. To that committee the Education Committee might turn from time to time for an expression of opinion as to the better co-ordination of the various technological classes. But in attempting such co-ordination it should not be forgotten that duplication is not always wasteful overlapping. An artisan does not always feel comfortable in an academic atmosphere.

It seems desirable that the evening work of the city should be graded into (1) elementary evening schools, (2) intermediate centres, and (3) higher centres. The higher centres would be the Armstrong College and the Rutherford College. As the former draws nearer to its apparent destiny of becoming an independent University, it will naturally concentrate itself on the non-elementary evening work. The intermediate centres might be at Heaton Park Road (or perhaps preferably at North View) and Westgate Hill, with two others, viz., in Benwell and Walker respectively. No students should be admitted to an intermediate evening centre except those who had passed through a suitable course at an elementary centre, or who could show, by passing an entrance examination, that they were fit to join the classes at the intermediate centre. No one, in turn, should be admitted to the evening classes at the Armstrong and Rutherford Colleges except after passing an entrance examination. There might be preparatory classes to help students to prepare for this entrance examination. These might be held at Westgate Hill, Heaton Park Road, and in Benwell and in Walker. There should be free studentships to take deserving students on from the elementary to the intermediate centres, and other studentships to take the best ones on further from the intermediate to the higher centres.

It would be expedient to arrange courses of evening lectures at certain centres, in accordance with some such plan as that which has been receiving the consideration of the Education Committee.

The whole of the elementary and intermediate evening work of the City would probably gain by the appointment of a young and active man to take charge of it, and to keep its various parts in good working order.

10.—The Teaching of Domestic Science.

The excellent and very useful work of the Northern Counties Training School of Cookery deserves cordial encouragement. The institution, which occupies a handsome building in a good position

in Northumberland Road, is supported by the joint efforts of the County Councils of Durham and Northumberland, and of the City and County Council of Newcastle-upon-Tyne. I was greatly pleased by what I saw of its work. The school gives the impression of cheerful efficiency. It is affording opportunities of an excellent training to several categories of students, notably to young women who intend to teach domestic science, and to others who have left the higher secondary schools and come to the classes in order to study the art of household management.

Turning to a subordinate part of the school's work I must confess my disappointment at finding that the opportunities offered to young girls, who have recently left the elementary schools, to obtain a three months' systematic training in domestic work at this school are not better appreciated by Newcastle parents. The scholarships of this kind, which are open to young girls from the Counties of Durham and Northumberland, are nearly always taken up. But from Newcastle itself there is hardly ever a full complement.

I would suggest that, if at some later time funds allow, it would be well to try in Newcastle, in affiliation to the Northern Counties Training School of Cookery, an experiment which, under Miss F. L. Calder's guidance, has been successful in Liverpool. In a house taken for the purpose (in Prince's Road), a number of girls from the public elementary schools are trained in domestic science. By means of a course extending over twenty weeks, the girls are instructed in cookery, laundry work, household sewing, home dress-making, domestic millinery, hygiene and housewifery. The school is open daily, except Saturday, from 9.30-4. The Principal and four teachers are resident, and the girls do the regular work of the house, including the cooking of a large dinner every day (charged for at 3d. a head) for themselves and the teachers. The teachers have their meals with the girls. There is accommodation for 70, and the school is full. The fee for instruction to girls from elementary schools is one shilling a week. Others pay half-a-crown a week. The school is divided for practical work into five classes, no class having more than fifteen pupils. Cookery, sewing, housewifery, dressmaking and laundry are taken in rotation a week at a time, the cycle being repeated four times in each session. In the afternoon the girls are taught the principles of their work. In the morning they apply those principles to the actual work of a house. Experience in purchasing and managing for small households is

given by a plan of small dinners for two or four persons. Each girl in turn plans a bill of fare at a given cost, buys the food with the sum allowed, and then cooks and serves the dinner. In dress-making every girl is measured for her own pattern, draws it, cuts it out, and makes the garment for herself.

The cost of maintaining such a school as this—giving to 150 girls in each year, a course of instruction extending over twenty weeks—would be about £700 a year *plus* the receipts from the pupils' fees. Thus the net cost per girl would be about £4 10s.

11.—Suggested establishment of an Industrial Museum.

A suggestion for the establishment of an Industrial Museum has been made to me by Mr. W. D. Oliver, of the Rutherford College, and I take this opportunity of submitting it, in Mr. Oliver's own words, for the consideration of the Committee. He writes as follows :—

"In a large industrial centre such as Newcastle, where of necessity there are many agencies for giving the necessary technical instruction to students who desire to equip themselves for their trade or profession, a very important aid ought to be a collection or museum illustrating the mechanical and other industries of the district.

It will be a matter of surprise to many that in Newcastle both teachers and students suffer from the disadvantages of there being no such provision whatever.

It ought to be possible to establish and equip a museum to illustrate such subjects as Engineering, Building Construction, Shipbuilding, Metallurgy, Mining, and other branches of local industry.

Any attempt to do so should be on strictly educational lines.

Thus, in the engineering department there should be models of all kinds of mechanical motions, valve gears, wheel work and other details, while prime movers would be illustrated by steam, air, gas, oil and electrical engines, either in the form of models or the actual machines.

Many of these might with advantage be shown in sections.

In cases where the machine, or a model of it, could not be obtained, drawings and photographs could be shown. There should also be a historical collection showing the development of the steam and other engines and machines.

All models, if possible, should be arranged to be set in motion by the visitor, the motive power being electricity.

Every object should have a description fixed to the case calling attention to the important points it is intended to illustrate.

A properly equipped workshop ought to be attached and one or more skilled mechanics engaged to carry out repairs and construct new models as required.

What has been said of illustrating the engineering branch applies to all the other branches of industry.

Many manufacturers have already in their works models which they would be willing to give or lend if a suitable home were provided for their accommodation.

Societies, especially such as include mechanics among their members (e.g. the Society of Model Engineers) might be encouraged to help by making suitable models, and either giving or lending them.

What an immediate advantage it would be to a student, and what a relief to the teacher, if there were in our City a collection such as has been indicated.

How helpful also would such a privilege be to the designer or inventor, who would be able to compare his ideas with those of others.

As to the ultimate benefit to the trade and commerce of the district and the country there surely can be no doubt."

12.—Suggested annual issue of an Educational Directory of Newcastle-upon-Tyne.

If the committee saw its way to issue annually an Educational Directory of the City, containing full particulars of the work, situation, courses of study, fees, etc., of all the educational institutions of Newcastle, including the public and recognised private secondary schools, their action would prove a boon to many parents, who would thus be able to obtain, in a cheap and convenient form, an authoritative statement of the educational resources of the City, and would gather from its pages valuable guidance in the choice of schools for their children. Such a directory would bring the details of the scholarship system, with its varied opportunities, clearly before the minds of parents. It would give a clear picture of the educational organisation of the city. It would show the links between one type of school and another. And thus it would afford guidance in difficulty; it would stimulate worthy ambition; it would do something to lessen the waste of educational opportunity which occurs through parental ignorance or shyness in asking questions; and it might well inspire an increasing number of citizens with the resolve to maintain a high level of all-round efficiency alike in the elementary, secondary and higher education of Newcastle-upon-Tyne.

13.—Summary of Recommendations.

It may be convenient if I now briefly recapitulate the gist of the recommendations submitted above for the consideration of the Education Committee. My inquiry has led me to the conclusion that the Committee would be well advised:

(1) To establish two higher elementary schools in the eastern and western parts of the City respectively, for boys and girls, with a course of study planned to cover three years from twelve to fifteen.

(2) To take over the Rutherford College day and evening work; to carry on the Rutherford Secondary Day School for Boys in the present building, and to establish a Rutherford Secondary Day School for Girls in other premises.

(3) To give additional grants to the Royal Grammar School, to Allan's Endowed Schools for Boys and Girls on certain conditions, and to St. Cuthbert's Grammar School.

(4) To encourage Private Secondary Schools to place themselves under inspection, to pay the cost of such inspection, and to grant to recognised efficient private schools certain privileges, *e.g.*, the right of sending in their pupils to the competition for City scholarships, the right, in certain cases of receiving junior scholars, and the benefit of loan collections of reference books and educational apparatus.

(5) To establish pupil teacher centres in organic connexion with the following middle secondary schools: Rutherford Secondary School for Boys, Rutherford Secondary School for Girls, Allan's Endowed School for Boys, Allan's Endowed School for Girls and St. Cuthbert's Grammar School; and to give assistance in respect of Roman Catholic girl pupil teachers from the City receiving instruction in the Convent of the Sacred Heart at Gosforth, provided that the pupil teacher centre there is reported efficient by the Board of Education.

(6) For the benefit of pupils coming from the proposed higher elementary schools to maintain the present pupil teacher centre, with a one year preparatory class attached.

(7) To maintain certificate classes for teachers working in the public elementary schools of the City.

(8) To develop the scholarship system.

(9) To give annually, the proceeds of a penny rate to the Armstrong College.

(10) To increase the annual grant made to the Elswick Institute, and the amount spent on evening classes at the Rutherford College, which it is proposed to municipalise.

(11) To grade the evening classes.

(12) To increase the grant to the School of Domestic Economy.

(13) To take into consideration the advisability of establishing an industrial museum illustrative of engineering, building construction, shipbuilding, metallurgy, mining and other branches of local industry.

(14) To form a Consultative Committee of teachers in elementary, higher elementary and secondary schools with a view to the better correlation of courses of study and the promotion of the educational interests of children passing from one grade of school to another.

(15) To establish a Board, representing the different centres giving technological teaching, with a view to the co-ordination of effort.

(16) To publish annually an Educational Directory for Newcastle-upon-Tyne.



CHAPTER V.

FINANCIAL SUMMARY AND ESTIMATE.

The cost of carrying out *in its entirety* the plan suggested for the Committee's consideration in the foregoing report may be estimated as follows. In framing the estimate, I have endeavoured to provide for the work being done with real efficiency, believing that to be, in the circumstances, the true economy. The plan suggested in the report could be carried out in instalments.

(1) CHARGEABLE TO THE RATE FOR ELEMENTARY EDUCATION.

Annual maintenance of two Higher Elementary Schools,
each for (say) 300 pupils, boys and girls, from twelve
to fifteen:

- (a) If with 25 per cent. free places and a fee of 6d.
a week payable by the rest of the pupils, the
annual maintenance charge would amount to
about £3,255*
- (b) If wholly free the annual maintenance charge
would amount to about 3,750

(2) CHARGEABLE TO THE RATE FOR HIGHER EDUCATION.†

Rutherford College Secondary Day School for Boys
(say 300 pupils)

Net annual maintenance charge, allowance
being made either for higher fees being
charged to non-ratepayers' children coming

* This estimate is based on the following calculation: the annual cost per head of maintenance is estimated at £9. Against this is set (1) the Government Grant of £2 15s. 0d., i.e., the average of the Grant for the first three years of the course under the Higher Elementary School Regulations, 1905, with the addition of the fee grant; (2) 16s. 6d. per head per annum from school fees, the latter being calculated at 6d. a week for a school year of forty-four weeks and 25 per cent. of free places being allowed for.

† The present grants of the City Council to Secondary Schools, including Rutherford College Secondary Day School, amount to about £1,248 10s.

from outside the City, or for contributions
from County Education Authorities, would
ultimately rise to about..... £1,350

Rutherford College Secondary Day School for Girls
(say 250 pupils)

Net annual maintenance charge, with allow-
ance made as above in the case of the boys'
school, would ultimately rise to about 920

Allan's Endowed Schools :

Boys	£200	
Girls	200	
		400

St. Cuthbert's Grammar School	350
-------------------------------------	-----

The Royal Grammar School	350
--------------------------------	-----

£3,370

(Under the head of Scholarships, proposals are made
for leaving exhibitions attached to each of the Girls'
Higher Secondary Schools.)

Private Schools:

Inspection and private schools and loan collections of books of reference and educational apparatus.....	250
---	-----

Pupil Teacher Centres, including those attached to Secondary Schools (two years, say, 100 P.T.'s annually).....	600*
--	------

Preparatory Class for intending P.T.'s coming from Higher Elementary Schools (one year, say, 30 pupils)	150†
--	------

Certificate Classes (say)	150
---------------------------------	-----

Scholarships (in addition to present provision) :

Junior scholarships (12-16), tenable according to pre- ference of scholars at public secondary and selected private secondary schools in the City and at the Convent of the Sacred Heart at Gosforth, 40 annually (20 boys and 20 girls). When in full operation.....	2,240
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* Estimated gross cost, £10 per head per annum; Government grant,
£7; net cost for each of the two years, £3.

† Estimated gross cost, £9 per head per annum; Government grant,
£4; net cost, £5.

1st year	£560	
2nd year.....	1,120	
3rd year	1,680	
4th year	2,240	
Allowances for books, at £1 5s. 0d. per head, to 160 junior scholars at one time. When in full operation		200
Fund for maintenance allowances in addition to scholarships (say)		200
Ten intermediate scholarships tenable for two years (16-18), including allowances for books. When in full operation (say)		300
Leaving exhibitions of £50 a year tenable for three years, one attached to each of the Girls' Higher Secondary Schools, viz.: the Central High School and the Church High School. When in full operation		300
Evening Class Studentships		100
Armstrong College†		6500
School of Domestic Economy		300
Rutherford College evening work		700
Elswick Institute.....		400
Evening Class Organisation, in addition to what is at present paid (say)		300
Educational Directory, annually (say)		50
Total.....	£16,110†	
Customs and Excise Duties	£4,392	
2d. rate (£6,500 × 2).....	13,000	
	£17,239	

April, 1905.

MICHAEL E. SADLER.

† Present Grant £1,200.

‡ The above does not include (1) the amount which it may be found necessary to pay in bursaries for pupil teachers (2) the present cost of ordinary evening continuation schools (3) grant to public libraries £250.

1. The first part of the paper discusses the importance of understanding the underlying structure of the data. This is particularly relevant in the context of machine learning, where the model's performance is heavily dependent on the quality and structure of the input data.

2. The second part of the paper focuses on the development of a new algorithm for handling missing data. This algorithm is designed to be more robust than existing methods, particularly in cases where the missing data is not missing at random.

3. The third part of the paper presents the results of a series of experiments conducted to evaluate the performance of the new algorithm. These experiments show that the new algorithm outperforms existing methods in terms of both accuracy and computational efficiency.

4. The fourth part of the paper discusses the implications of these findings for the broader field of machine learning. It highlights the need for more robust methods for handling missing data and suggests potential directions for future research.

5. Finally, the paper concludes with a summary of the key findings and a discussion of the limitations of the current study. It also includes a list of references and an appendix containing additional details about the experiments and the algorithm.

APPENDICES.

APPENDIX A.

STATISTICAL TABLES.

1

APPENDIX A.
I.—NUMBER AND AGES OF PUPILS IN PUBLIC SECONDARY SCHOOLS, NEWCASTLE-UPON-TYNE,
SUMMER TERM, 1904.

NAME OF SCHOOL.	under 8.	8 and under 9.	9 and under 10.	10 and under 11.	11 and under 12.	12 and under 13.	13 and under 14.	14 and under 15.	15 and under 16.	16 and under 17.	17 and under 18.	18 and over.	Totals.
BOYS.													
Royal Grammar School	..	3	5	21	37	44	65	46	34	11	4	3	273
Allan's Endowed School	1	7	13	23	30	23	50	39	17	1	..	..	193
St. Cuthbert's Grammar School	..	3	4	9	10	13	22	40	21	11	8	5	146
Totals.....	1	13	22	52	67	80	137	125	72	23	12	8	612
GIRLS.													
Central Newcastle High School (G.P.D.S.Co.)...	14	9	7	12	18	22	14	21	19	19	7	6	169*
Newcastle High School (Church Schools Co.)...	14	4	5	10	11	13	24	22	16	11	11	4	145†
Allan's Endowed School	..	1	5	6	13	26	24	39	34	9	5	..	167
St. Anne's Secondary School	17	5	9	11	9	14	7	9	7	2	..	..	90‡
Totals.....	45	19	26	39	56	75	69	91	76	41	23	10	570
Co-EDUCATIONAL.													
Rutherford College Secondary Day School	..	18	18	21	53	121	177	143	69	13	7	3	638
Grand Totals (Boys and Girls)...	46	45	66	112	176	276	383	359	217	77	42	21	1820

* Including 9 student teachers and 11 little boys.
† Including 3 little boys.
‡ Including 11 little boys.
|| Boys, 401; girls, 237; ages not given separately. The ages are given as at the beginning of the school year, 1903-4.

APPENDIX A.
II.—NUMBER AND AGES OF PUPILS IN PRIVATE SECONDARY SCHOOLS, NEWCASTLE-UPON-TYNE,
SUMMER TERM, 1904.

CLASS OF SCHOOL.	Under 10.	10 and under 12.	12 and under 14.	14 and under 16.	15 and under 16.	16 and under 17.	17 and under 18.	18 and over.	Totals.
Boys— Class A (1 school).....	19	16	9	1	..	..	..	..	45
Class B (9 schools).....	95	2	..	..	..	..	..	..	97
Class D (6 schools).....	29	89	67	31	17	20	5	4	212*
Class D (2) (1 school).....	4	5	2	1	8	..	..	..	15
Class D (3) (1 school).....	..	..	20	21	..	..	..	..	41
Class E (2 schools).....	16	..	..	..	..	..	..	..	16
Totals	163	63	98	54	20	20	5	4	426
GIRLS— Class B (9 schools).....	126	68	69	36	33	23	2	4	361
Class C (1 school).....	4	6	3	6	6	5	5	..	35
Class D (2) (1 school).....	1	1	3	2	1	..	..	..	8
Class D (3) (1 school).....	..	..	28	23	..	..	..	..	46
Class E (2 schools).....	27	7	..	..	..	..	..	..	34
Totals	158	82	98	67	40	28	7	4	484
Totals (Boys and Girls)...	321	144	196	121	60	48	12	8	910
Grand Totals (Boys and Girls in Public and Private Secondary Schools).....	478	432	855	490	277	125	54	29	2730

* Includes 1 girl.

APPENDIX A.
III.—NUMBER OF PUPILS IN PUBLIC SECONDARY SCHOOLS IN NEWCASTLE-UPON-TYNE CLASSIFIED
ACCORDING TO THE NUMBER OF TERMS COMPLETED ON JULY 1st, 1904.

NAME OF SCHOOL.	NUMBER OF PUPILS WHO HAVE ONLY COMPLETED THE UNDERMENTIONED NUMBER OF TERMS.																			
	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17 ov'r.	18 ov'r. Total.	
Boys.																				
Royal Grammar School	16	26	32	17	18	25	14	21	19	6	18	11	9	5	13	7	2	4	10	273
Allan's Endowed School	20	22	23	21	17	20	12	18	4	6	6	6	1	1	1	4	1	3	7	193
St. Cuthbert's Grammar School	10	26	30	3	7	20	1	2	23	1	2	10	..	..	2	1	1	1	6	146
Totals	46	74	85	41	42	65	27	41	46	13	26	27	10	6	16	12	4	8	23	612
Girls.																				
Allan's Endowed School	5	32	30	9	12	16	3	9	10	3	6	7	2	5	4	3	2	5	4	167
Central Newcastle High Schl. (G.P.D.S.Co.)	8	17	22	8	9	22	4	8	9	10	11	3	8	7	3	2	2	..	12	168*
Newcastle High School (Ch. Schools' Co.) ..	7	12	10	7	4	8	6	9	9	9	8	12	9	2	6	1	6	5	15	145
St. Anne's Secondary School	1	13	6	15	1	4	9	1	4	8	9	4	4	..	3	4	..	..	4	90
Totals	21	74	68	39	26	50	22	27	32	30	34	25	23	14	16	10	10	10	35	570
Co-EDUCATIONAL.																				
Rutherford College Secondary Day School..	..	39	27	221	45	13	122	30	4	56	12	6	34	6	..	7	2	1	13	638
Grand Totals	67	187	180	301	113	128	171	98	82	99	72	59	67	26	32	29	16	19	71	1820

* Three student teachers are included in this total.

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APPENDIX B.

CURRICULA OF PUBLIC SECONDARY SCHOOLS FOR BOYS AND GIRLS IN NEWCASTLE-UPON-TYNE AND OF ONE PRIVATE SECONDARY SCHOOL PREPARING BOYS FOR THE GREAT PUBLIC SCHOOLS. SUMMER TERM, 1904.

I.—PUBLIC SECONDARY SCHOOLS.

(a) Higher Secondary Schools:

The Royal Grammar School.

The Central Newcastle High School for Girls.

The Newcastle High School for Girls.

(b) Middle Secondary Schools:

Allan's Endowed School for Boys.

Allan's Endowed School for Girls.

St. Cuthbert's Grammar School for Boys.

Rutherford College Secondary Day School (Co-educational).

II.—PRIVATE SECONDARY SCHOOL.

Newcastle Preparatory School.

ROYAL GRAMMAR SCHOOL.

	Name or Number of Form (lowest on left).													
	I.	II. b	II. a	III. mod. class	III. b	III. a	IV. mod. class	IV. b	IV. a	V.	VI.			
Number in Form*	8	24	34	30	26	..	..	15	26	..	..	20	8	
Average Age	10	11.4	12.5	13.4	13	..	..	13.8	13.9	..	..	14.6	17	
RELIGIOUS KNOWLEDGE	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	$\frac{3}{4}$	..	..	$\frac{3}{4}$	1	..	..	$\frac{3}{4}$	$\frac{3}{4}$	
English Language and Literature, including also Reading, Dictation and Composition	$6\frac{3}{4}$	$6\frac{1}{4}$	$5\frac{1}{4}$	$3\frac{3}{4}$	3	..	..	$1\frac{1}{2}$	$2\frac{1}{4}$	..	..	$2\frac{1}{4}$	$1\frac{1}{2}$	
HISTORY & GEOGRAPHY.	$3\frac{1}{2}$	3	$2\frac{1}{4}$	$1\frac{3}{4}$	$1\frac{3}{4}$	..	..	$1\frac{1}{2}$	3	..	..	$2\frac{1}{4}$	$\frac{3}{4}$	
Latin	$3\frac{3}{4}$	$4\frac{1}{4}$	$3\frac{3}{4}$	..	$4\frac{1}{2}$	..	..	..	$4\frac{3}{4}$	..	..	$4\frac{3}{4}$	$5\frac{1}{4}$	
French	..	..	3	$3\frac{3}{4}$	3	..	..	4	3	..	..	$4\frac{1}{4}$	$2\frac{1}{4}$	
German	..	..	..	..	..	..	..	$2\frac{1}{4}$	..	..	..	$4\frac{3}{4}$	..	
Greek	..	..	..	..	..	..	..	..	..	..	..	..	$5\frac{1}{4}$	
Commercial Subjects ..	..	..	..	3	..	..	..	3	..	..	..	..	..	
MATHEMATICS	4	$5\frac{1}{2}$	5	$6\frac{1}{4}$	6	$6\frac{1}{4}$	6	$6\frac{3}{4}$	$6\frac{3}{4}$	$6\frac{3}{4}$	$6\frac{3}{4}$	7	$6\frac{3}{4}$	
Natural Science:—														
Physics	..	..	..	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	
Chemistry	..	..	..	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	$2\frac{1}{4}$	
Botany	..	..	..	..	..	..	..	..	..	..	..	..	..	
Physical Geography...	$1\frac{1}{2}$	$1\frac{1}{2}$	..	..	..	..	..	..	..	..	..	..	..	
Geometry	..	..	2	..	..	..	..	..	..	..	..	..	..	
MUSIC—Vocal	1	1	1	..	..	..	..	..	..	..	..	..	..	
Woodwork or other Manual Training....	..	..	..	..	..	..	..	..	..	..	..	..	..	
Drawing	$2\frac{1}{4}$	$\frac{3}{4}$	$1\frac{1}{2}$	3	$2\frac{1}{4}$	..	..	3	3	..	..	$2\frac{1}{4}$	..	
Writing	$3\frac{1}{4}$	3	$1\frac{1}{2}$	..	..	..	..	..	..	..	..	..	..	
Drill	..	..	..	..	..	..	..	..	..	..	..	..	..	
Gymnastics	$\frac{3}{4}$	$1\frac{1}{2}$	$1\frac{1}{2}$	$\frac{3}{4}$	$1\frac{1}{2}$	..	..	$\frac{3}{4}$	$\frac{3}{4}$	..	..	$\frac{3}{4}$	$\frac{3}{4}$	
Total	$27\frac{1}{2}$	$27\frac{1}{2}$	$27\frac{1}{2}$	$27\frac{1}{2}$	$27\frac{1}{2}$	..	..	$28\frac{1}{4}$	29	..	..	$28\frac{1}{4}$	$28\frac{1}{4}$	
Subjects for which Pupils are re-classified	In III. Mod: and III. Class: and in IV. Mod: and IV. Class: pupils are re-classified for Mathematics and Science, and the Forms are then known as III.a, III.b, and IV.a, IV.b.													

* The numbers do not include the 82 boys in the Branch School.
§ In Form V. Latin and German are alternative.

The School is recognised by the Board of Education as a Secondary Day School (Division B. old regulations).

CENTRAL NEWCASTLE HIGH SCHOOL (G.P.D.S. Co.)

	Name or Number of Form (lowest on left).								
	K. G.	I.	II. b	II. a	III.	IV.	V.	VI. b	VI. a
Number in Form	23	21	34	32	27	14	9	3	2
Average Age	7 $\frac{1}{2}$	10	11 $\frac{1}{2}$	13 $\frac{1}{2}$	14 $\frac{1}{2}$	15 $\frac{1}{2}$	15 $\frac{7}{10}$	16 $\frac{1}{2}$	18
RELIGIOUS KNOWLEDGE		$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
English Language and Literature, including also Reading, Dictation, and Composition	4	5 $\frac{1}{2}$	2 $\frac{3}{4}$	1 $\frac{1}{2}$	+	+	+	+	+
History	$\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2 $\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Geography	$\frac{1}{2}$	1	$\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	$\frac{1}{2}$	..	..	..
Latin	..	..	..	..	2 $\frac{1}{2}$ *	2 $\frac{1}{2}$ *	2 $\frac{1}{2}$ *	2 $\frac{1}{2}$ *	3 $\frac{1}{2}$
French	..	1 $\frac{1}{2}$	4 $\frac{1}{2}$	3	3 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$
German	..	..	..	..	2 $\frac{1}{2}$ *	2 $\frac{1}{2}$ *	2 $\frac{1}{2}$ *	2 $\frac{1}{2}$ *	..
Greek	..	..	..	..	..	..	..	..	..
MATHEMATICS:									
Arithmetic	2 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	$\frac{1}{2}$
Geometry	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	$\frac{1}{2}$
Algebra	..	..	..	..	..	..	..	..	$\frac{1}{2}$
Dynamics	..	..	..	..	..	..	..	..	$\frac{1}{2}$
Trigonometry	..	..	..	..	..	..	..	..	1 $\frac{1}{2}$
Natural Science	3 $\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	..	..	..	..	..
Physics	..	..	..	..	1	1 $\frac{1}{2}$	..	..	..
Chemistry	..	..	..	..	..	..	2 $\frac{1}{2}$	..	2 $\frac{1}{2}$
Botany	..	..	..	..	..	..	..	2 $\frac{1}{2}$	..
Music—Vocal	3	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Instrumental†	..	..	..	..	..	..	..	..	..
Drawing	1 $\frac{1}{2}$	1	1	1	1	1	1	1	..
Writing	1	1	..	..	..	..	..	..	..
Brushwork	$\frac{1}{2}$	..	..	..	..	..	..	..	..
Cookery	..	..	..	..	..	..	..	..	..
Modelling	$\frac{1}{2}$	..	..	..	..	..	..	..	..
Domestic Economy	..	..	..	..	..	..	..	..	..
Needlework	1	..	..	..	..	..	..	..	..
Drill	1 $\frac{1}{2}$	1 $\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Gymnastics (optional)	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$	$\frac{1}{2}$
Total	12 $\frac{1}{2}$	16 $\frac{1}{2}$	18 $\frac{1}{2}$	17 $\frac{1}{2}$	16 $\frac{1}{2}$	16 $\frac{1}{2}$	18 $\frac{1}{2}$	17 $\frac{1}{2}$	18 $\frac{1}{2}$
Usual amount of Home Lessons	..	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2	2	**	**

Subjects for which Pupils are re- Drawing and Gymnastics, and, in a few classified cases, Languages.

There is no set time for Religious Instruction in the Kindergarten; it is given as occasion arises.

The upper forms have this year read some Literature in connexion with their History, and have, of course, also written English in connexion with it. In these forms we take History and Literature in alternate years.

* Latin and German are alternative subjects in Forms III-VIb

† Nature Lessons.

‡ Pianoforte pupils have one hour's teaching (two half-hour lessons) per week.

** The amount of home work in the two highest forms cannot be exactly stated.

The School is recognised by the Board of Education as a Secondary Day School (Division B. old regulations).

NEWCASTLE HIGH SCHOOL (CHURCH SCHOOLS Co.)

	Name or Number of Form (lowest on left).								
	K. G.	I.	II.	III. b	III. a	IV.	V.	VI. b	VI. a §
Number in Form.....	5	22	21	19	21	24	20	8	5
Average Age	..	..	11 $\frac{5}{12}$	12 $\frac{2}{3}$	13 $\frac{1}{2}$	14 $\frac{1}{2}$	15 $\frac{1}{2}$	16 $\frac{1}{2}$	18 $\frac{1}{12}$
RELIGIOUS KNOWLEDGE.....	..	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{5}{12}$
English Language and Literature, including also Reading, Dictation and Composition	..	4	3	3 $\frac{1}{2}$	2 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	3	3
HISTORY AND GEOGRAPHY	..	1 $\frac{1}{2}$	2	1 $\frac{1}{2}$	3	2 $\frac{1}{2}$	2 $\frac{1}{2}$	2 $\frac{1}{2}$	1
Latin	..	..	..	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2*	2*	2 $\frac{1}{12}$ *	2 $\frac{1}{12}$ *
French	..	1 $\frac{1}{2}$	2 $\frac{1}{2}$	2	2	1 $\frac{1}{2}$	1 $\frac{1}{2}$	2	2
German.....	..	..	..	..	..	2*	2*	2 $\frac{1}{12}$ *	2 $\frac{1}{12}$ *
Greek	..	..	..	..	..	..	..	1	1
MATHEMATICS	..	3 $\frac{1}{2}$	2 $\frac{1}{2}$	3 $\frac{1}{2}$	3 $\frac{1}{2}$	4 $\frac{1}{2}$	4 $\frac{1}{2}$	3 $\frac{1}{2}$	4 $\frac{1}{2}$
Natural Science	..	..	..	1 $\frac{1}{2}$	1 $\frac{1}{2}$	..	..	..	..
Physics	..	..	..	..	..	..	..	..	3
Chemistry	..	..	..	..	..	..	..	..	..
Botany	..	1 $\frac{1}{2}$	3	..	..	3	3	1 $\frac{5}{12}$	1 $\frac{5}{12}$
MUSIC—Vocal	..	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Instrumental.....	..	3-1	3-1	3-1	3-1	3-1	3-1	3-1	3-1
Theoretical †	..	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	..	..
Drawing	..	1 $\frac{1}{4}$	1 $\frac{1}{4}$	1	1	3	1	1	1
Writing	..	1 $\frac{1}{4}$	1 $\frac{1}{4}$	..	..	..	..	..	..
Cookery	..	..	..	..	..	..	..	..	..
Domestic Economy	..	..	..	..	..	..	..	..	..
Needlework	..	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	..	1 $\frac{1}{2}$	..	..
Drill	..	5 $\frac{3}{4}$	5 $\frac{3}{4}$	4 $\frac{3}{4}$	5 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Gymnastics	..	5 $\frac{3}{4}$	5 $\frac{3}{4}$	4 $\frac{3}{4}$	5 $\frac{3}{4}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$	1 $\frac{1}{2}$
Total	..	18 $\frac{3}{4}$ or 19 $\frac{1}{12}$	18 $\frac{1}{12}$ or 19 $\frac{1}{12}$	19 $\frac{3}{4}$ or 20 $\frac{1}{12}$	20 $\frac{1}{12}$ or 21 $\frac{1}{4}$	15 $\frac{1}{12}$ or 19 $\frac{1}{4}$	20 $\frac{1}{12}$ or 20 $\frac{3}{4}$	18 $\frac{3}{4}$ or 19 $\frac{1}{4}$	20 or 20 $\frac{1}{2}$
Usual amount of Home Lessons (per week)	..	..	8 $\frac{1}{3}$	9 $\frac{2}{3}$	9	10	10	14 $\frac{1}{2}$	15 $\frac{2}{3}$
Subjects for which Pupils are re- classified.....	Mathematics.								

§ In Form VI.a the girls are specialising in different subjects—so that the hours marked in some cases only apply to one or two girls.

* Latin and German are alternatives in Forms IV. to VI.a.

† In many cases Theory is taken at the same time as the Piano lesson.

The School is recognised by the Board of Education as a Secondary Day School (Division B. old regulations).

ALLAN'S ENDOWED SCHOOL—Boys.

	Name or Number of Form (lowest on left.)							
	I.	II.	III.	IV. b	IV. a	V. b	V. a	VI.
Number in Form	20	27	30	31	27	26	22	10
Average Age	9.3	10.9	12.2	13.2	14.1	13.8	15.2	15.3
RELIGIOUS KNOWLEDGE	3½	3½	3½	3½	3½	3½	3½	3½
English Language and Literature, including also Reading, Dictation, and Composition	7	7	8	6½	5½	3½	3½	3½
HISTORY AND GEOGRAPHY	3½	3½	4	3½	3½	3½	3	3
Latin	..	3½*	3½*	3½*	3½*	3½*	3½*	3½*
French	..	2½	2½	2½	2½	2½	2½	2½
German	..	..	..	..	..	..	..	..
Greek	..	..	..	..	..	..	..	..
MATHEMATICS	6½	6½	6½	6	6	7½	7½	7½
Natural Science:—								
Physics	..	..	..	..	..	..	..	..
Chemistry (Theoretical)	..	..	..	2	2	2	2	2
Botany	..	..	..	..	..	..	..	..
Practical, Plane and Solid Geometry ..	..	..	..	..	..	2	2	2
MUSIC—Vocal	..	2	2	..	..	..	..	..
Woodwork or other Manual Training...	2	2	2	2	1½	1½	1	1
Drawing	2½	2½	1½	3½	1½	1½	2	2
Writing	1½	1½	1½	1½	..	..	..	..
Commercial Subjects	..	..	..	3½*	3½*	3½*	3½*	3½*
Extra Reading and Spelling	..	3½*	3½*	..	..	..	..	..
Drill	..	..	..	..	..	..	..	..
Gymnastics	1	1	1	1	2	2	2	2
Total	25½	32½	32½	31½	29½	28½	30½	30½
Subjects for which Pupils are re-classified	Mathematics, French and Latin.							

* Latin is alternative with Commercial Subjects in Upper Forms and with Reading and Spelling in the Lower ones.

ALLAN'S ENDOWED SCHOOL—GIRLS.

	Name or Number of Form (lowest on left).									
	I.	II.	III. b	III. a	IV. b	IV. a	V.	VI. b	VI. a	
Number in Form.....	17	23	18	20	17	19	27	16		
Average Age	9 ⁷ ₁₂	11 ³ ₄	13	13 ¹ ₈	14 ¹ ₈	13	14 ³ ₄	15 ¹ ₂		
RELIGIOUS KNOWLEDGE*	2 ¹ ₂	2 ¹ ₂	2 ¹ ₂	2 ¹ ₂	2 ¹ ₂	2 ¹ ₂	2 ¹ ₂	2 ¹ ₂	2 ¹ ₂	
English Language and Literature, including also Reading, Dictation and Composition	6	5 ³ ₄	5 ³ ₄	5 ¹ ₄	5 ¹ ₄	4 ³ ₄	4 ¹ ₂	4 ³ ₄	3	
HISTORY AND GEOGRAPHY	1 ¹ ₂	2 ¹ ₄	2 ¹ ₄	3 ¹ ₄	3 ¹ ₄	4	4	4	4	
Latin								1 ³ ₄	2 ¹ ₂	
French	1 ¹ ₂	1 ¹ ₂	1 ¹ ₂	2 ¹ ₂	2 ¹ ₂	2 ¹ ₂	2 ¹ ₂	2 ¹ ₂	3 ¹ ₄	
German										
Greek										
MATHEMATICS	3 ³ ₄	3 ³ ₄	4 ¹ ₂	3 ³ ₄	3 ³ ₄	5 ¹ ₂	4 ³ ₄	5 ¹ ₂	4 ³ ₄	
Natural Science:—										
Physics										
Chemistry										
Botany	¹ ₂	1 ¹ ₂	1 ¹ ₂	1 ¹ ₂	1 ¹ ₂					
Human Physiology and Hygiene..						1	2	1	2	
Music—Vocal	¹ ₂	¹ ₂	¹ ₂	¹ ₂	¹ ₂	¹ ₂	¹ ₂	¹ ₂	¹ ₂	
Woodwork or other Manual Training.	³ ₄									
Drawing	2 ¹ ₂	1 ³ ₄	1 ³ ₄	2 ³ ₄	2 ³ ₄	2	2	2	2	
Writing	1	¹ ₂	¹ ₂							
Cookery										
Domestic Economy.....		¹ ₂								
Needlework	2	2	2	1	1	1	1			
Drill§										
Gymnastics§										
Total†	22 ¹ ₂	22 ³ ₄	22 ³ ₄	22 ³ ₄	22 ³ ₄	23 ¹ ₂	23 ³ ₄	24 ¹ ₂	24 ¹ ₂	
Usual amount of Home Lessons....	¹ ₂	¹ ₂	¹ ₂	1	1	1 ¹ ₂	1 ¹ ₂	2	2	
Subjects for which Pupils are re- classified	French and Mathematics (upper forms).									

* A large proportion of the pupils are withdrawn for Church Catechism, very few for Old and New Testament.

§ No room available. Application made to Governors for hire of room.

† The Lower Forms leave at 12 noon and at 4 p.m., as the Cloak Room is very small.

Form IV.a takes the Syllabus for the Cambridge Preliminary Local Examination.

Form V. for the Cambridge Junior Local.

Form VI.b for the Cambridge Senior Local.

Form VI.a for the Durham 1st B. Litt. Examination.

ST. CUTHBERT'S GRAMMAR SCHOOL.

	Name or Number of Form (lowest on left).					
	I.	II.	III.	IV.	V.	VI.
Number in Form	36	47	35	12	9	7
Average Age.....	11.4	13.3	14.3	15	16	17.3
RELIGIOUS KNOWLEDGE	2	2	2	1½	1½	1½
English Language and Literature, including also Reading, Dictation and Composition.....	9½	9	4½	3½	3½	3½
History and Geography.....						
Latin.....	..	4	4	4	4	4
French	..	3½	3	4	4	4
German	..	..	..	..	..	..
Greek	..	4	4	4	4	4
MATHEMATICS	6½	5	5½	4	4	4
Natural Science:—						
Physics.....	..	1½	2½	2½	3½	3½
Chemistry	..	1½	2½	4½	7	7
Music—Vocal.....	..	..	..	..	..	..
Instrumental	..	..	..	..	..	..
Theoretical	..	..	..	..	..	..
Woodwork or other Manual Training..	..	..	1½	2	..	..
Drawing	..	1	3	3	..	..
Writing.....	2	1	..	..	..	..
Drill	1	1	..	..	..	..
Gymnastics	..	..	..	..	..	..
Total.....	21	33½	32	32½	31½	31½
Usual Amount of Home Lessons	2	2	2	2	2	2
Subjects for which Pupils are re- classified	Classics, Drawing, and Woodwork.					

The School is recognised by the Board of Education as a Secondary Day School (Division A, old regulations).

	Name or Number of Form (lowest on left).											
	Junior.				Inter.	Senior.						
	IV.	III.	II.	I.		1st year	2nd year	3rd year.		4th year.		
								boys	girls	boys	girls	
Number in Form	25	35	62	69	49	237	108	35		18		
Average Age.....	8½	10½ ₁₀	11½	12½	13½ ₁₀	13½	14	15½		16½		
RELIGIOUS KNOWLEDGE ..	..	..	..	..	..	..	..	..	..	..	..	
English Language and Literature, including also Reading, Dictation, and Composition.....	9½	9½	9½	7½	8½	3	2½	2½	2½	2½	2½	
HISTORY AND GEOGRAPHY..	3	3	3½	3½	2½	1½	2½	2	2	2	2	
Latin	..	..	..	2½*	3*	5*	5*	3	3	3	3	
French	..	..	..	2½*	3*	5*	5*	3*	3*	3*	3*	
German	..	..	..	..	..	5*	5*	3*	3*	3*	3*	
Greek	..	..	..	..	..	..	..	..	..	..	..	
Extra Languages.....	..	..	..	..	..	..	..	2*	2*	3*	3*	
Extra English	..	..	..	..	..	..	..	..	..	1*	1*	
Arithmetic	8½ ₈	8½ ₈	7½	..	..	..	..	..	..	..	..	
	6½	6½	5	5½	..	..	..	..	..	..	..	
MATHEMATICS	..	..	..	2½	7½	3½	3½	3½	3½	3½	3½	
Natural Science—	..	..	..	..	..	..	..	..	..	..	..	
Physics (Theoretical and Practical)	..	..	..	..	..	3½	3½	3½	..	3½	..	
Chemistry ..	..	..	..	..	..	3½	3½	4½	..	4	..	
Botany	..	..	..	..	..	..	..	..	..	..	..	
Mechanics	..	..	..	..	..	..	..	..	..	..	..	
Physiology	..	..	..	..	..	..	..	4	..	..	4½	
Hygiene	..	..	..	..	..	..	..	3½	..	3½	..	
MUSIC:												
Vocal	½	½	½	½	..	..	..	..	..	..	..	
Instrumental	..	..	..	..	..	..	..	..	..	..	..	
Theoretical	..	..	..	..	..	..	..	..	..	..	..	
Woodwork or other Manual Training.....	..	..	..	..	..	2	2	2	2	2*	2*	
Drawing (Freehand	1½	1½	2½	1	..	1½	1½	..	..	..	..	
Geometry	..	..	..	..	..	1½	1½	2*	2*	2*	2*	
Writing	..	..	..	..	..	..	..	..	..	..	..	
Cookery ..	..	..	..	..	..	..	..	..	..	..	..	
Domestic Economy	..	..	..	..	..	..	..	..	..	..	..	
Needlework	2	2	2	2	..	..	..	..	..	..	..	
Drill	..	..	..	..	..	..	..	..	..	..	..	
Weekly Examination.....	2	1½	1½	1½	1½	1½	..	..	..	..	..	
TOTAL.....	25½	24½	24½	24½	25½	26½	26½	27	27	27	27	
Usual Am't of Home Lessons	½	¾	1	1½	1½	1½	2	2 to 2½ hours.				
Subjects for which Pupils are re-classified							Languages.					

NOTES ON RUTHERFORD COLLEGE SECONDARY DAY SCHOOL.

The School is recognised by the Board of Education as a Secondary Day School (Division A., old regulations).

The 237 pupils in the 1st year of the recognised school are divided into seven classes, and the 108 pupils in the 2nd year into three classes.

* Alternative subjects are marked with an asterisk. Pupils in the 1st year Senior confine themselves to one foreign language to which they give five hours a week. In the 2nd year, with few exceptions, they do the same, continuing the same language. In the 3rd year and upwards they continue the one they have been learning and take up another. In the 3rd year all girls do, and boys may, give up geometry. The two hours thus released are given to Latin. In the 4th year, boys and girls may give up both geometry and manual training. Of the four hours thus released one is given to English and three to languages. The number of hours devoted to languages in the 3rd and 4th years are, therefore, as follows:—In the 3rd year, if geometry is retained, 6 hours (Latin 3, French or German 3); if geometry is given up, 8 hours (Latin 5, French or German 3). In the 4th year, if geometry and manual training are retained, 6 hours (Latin 3, French or German 3); if geometry is omitted, 8 hours (Latin 5, French or German 3); if both geometry and manual training are omitted 9 hours (Latin 5, French or German 4).

† Music: Provision is made outside the time-table for instrumental music, theoretical and practical. It is optional. Two lessons a week of 20 minutes each are given. Practice at night at home of at least half an hour.

‡ Girls in all the senior classes have two hours a week for needlework, dresscutting and dressmaking, except in the 4th year where these subjects are optional. This is entered in time-table as manual training.

§ Girls in the Senior School who have had no course previously have two hours cookery on Saturdays for a period of twenty weeks.

§ Boys. || Girls.

NEWCASTLE PREPARATORY SCHOOL.

	Name or Number of Form (lowest on left).					
	I. & II.	III. b	III. a	IV. b	IV. a	V.
Number in Form	11	9	11	5	7	2
Average Age.....	9	9½	11½	11½	13½	14
RELIGIOUS KNOWLEDGE	1½	1	1	1	1	1
English Language and Literature, in- cluding also Reading, Dictation, and Composition	5½	3	3	1	1	1
HISTORY AND GEOGRAPHY	6	4	4	4	4	2
Latin	..	4	4	5	5	6
French	5	5	5	3	3	3
German	..	..	..	..	..	..
Greek	..	..	..	5	5	6
MATHEMATICS	6	7	7	5	5	5
Natural Science:—						
Physics.....	..	..	..	..	..	..
Chemistry	..	..	..	..	..	..
Botany.....	..	..	..	..	..	..
Music—Vocal.....	..	..	..	..	..	..
Instrumental	..	..	..	..	..	..
Theoretical	..	..	..	..	..	..
Woodwork or other Manual Training..	..	..	..	..	..	..
Drawing	..	..	..	..	..	..
Writing	..	..	..	..	..	..
Drill	1	1	1	1	1	1
Gymnastics						
Total.....	25	25	25	25	25	25
Usual amount of Home Lessons	½	¾	¾	1	1½	1½
Subjects for which Pupils are re- classified	None.					

NOTE.—There is an optional Drawing Class, 1 hour per week; about 10 boys attend. The majority of the boys have their own private Masters or Mistresses for Music Lessons. Swimming Lessons (optional) are given in the summer term; about three-quarters to seven-eighths of the boys attend.

APPENDIX C.

LIST OF SCHOLARSHIPS AT THE DISPOSAL OF THE NEWCASTLE-UPON-TYNE EDUCATION COMMITTEE. NOVEMBER, 1904.

1.—CORPORATION SCHOLARSHIPS.

Armstrong College (10).—Open to candidates of either sex, tenable for two years, and renewable for a third year subject to satisfactory progress. Admitting to any ordinary course (day) at the College. Candidates must be residents of Newcastle.

Bursaries may be granted by the Education Committee to necessitous cases.

Rutherford College (30).—Open to boys and girls of the Public Elementary Schools of Newcastle, who have passed Standard VI., entitling holders to free education and the necessary text books. Tenable for one year, but renewable for a second, third, and fourth year, subject to satisfactory progress being made.

Northern Counties' Training School of Cookery and Domestic Economy (10).—For girls over 15 years of age, tenable at the school for three months.

(Subjects of Instruction—Cookery, Scullery Work, Laundry Work and Dressmaking).

Northern Counties' Training School of Cookery and Domestic Economy (2).—One for a course of instruction for a Teaching Diploma in Cookery, and the other for a course of instruction for a Teaching Diploma in Laundry Work. Candidates must be over 18 years of age, and must pass a preliminary examination.

Education Committee's Evening Scholarships.—Open to boys and girls who are 14 years of age and above, and who have attended Public Elementary Schools in Newcastle. Number offered—five for every 100 on the books of each senior school. The Responsible Teachers of Evening schools are also allowed to nominate a number of candidates.

About 1,000 of these scholarships were awarded at the beginning of the present Evening School Session.

[The bursaries which are awarded to boys and girls in Preparatory Classes are not included in the above.]

2.—OTHER SCHOLARSHIPS.

Royal Grammar School (15)—five of which are awarded annually. —Open to boys from the Public Elementary Schools of Newcastle and tenable for three years. Afford holders free education with the use of all necessary text-books and apparatus.

Commercial Scholarships (6)—Open to boys who are not less than 14 years of age; tenable at the Commercial Institute, admitting holders to day classes—and evening classes also if they wish. Tenable for one year, but may be extended if suitable progress is made.

Art Scholarships at Armstrong College (12).—Two day (admitting to all the Day Art Classes), and ten evening (permitting attendance at Art Classes on three evenings in the week). Open to boys, the former to those about to leave school, and the latter to those who have passed the Sixth Standard. Candidates must undergo a competitive examination. All these scholarships are tenable for one year and are renewable for a second and third year if satisfactory progress is made by holders.

Allan's Endowed School.—30 Foundation Scholarships (15 first class and 15 second class), open to boys and girls (20 for boys and 10 for girls), in Church Schools; and, in the absence of candidates of sufficient merit from such schools, to scholars in any of the Public Elementary Schools in Newcastle. All candidates must have reached the standard for total exemption from school attendance.

First class scholarships entitle the holders to free tuition and to a payment of £3 per annum, to be applied

at the discretion of the Governors of the school for the benefit of the holder; second class scholarships entitle the holders to free tuition only. The scholarships are tenable, by boys until they are 16 years of age, and by girls until they are 17 years of age.

Royal Jubilee Educational Charity for Girls.—Exhibitions, value £10 per year for two years and tenable at any training college approved by the trustees, are awarded by the trustees of the charity, and are open to girls who are *bona-fide* residents of Newcastle-upon-Tyne, and who have been, for not less than six years in a Public Elementary School or Schools, and have reached a standard of education higher than that which qualifies them to leave school.

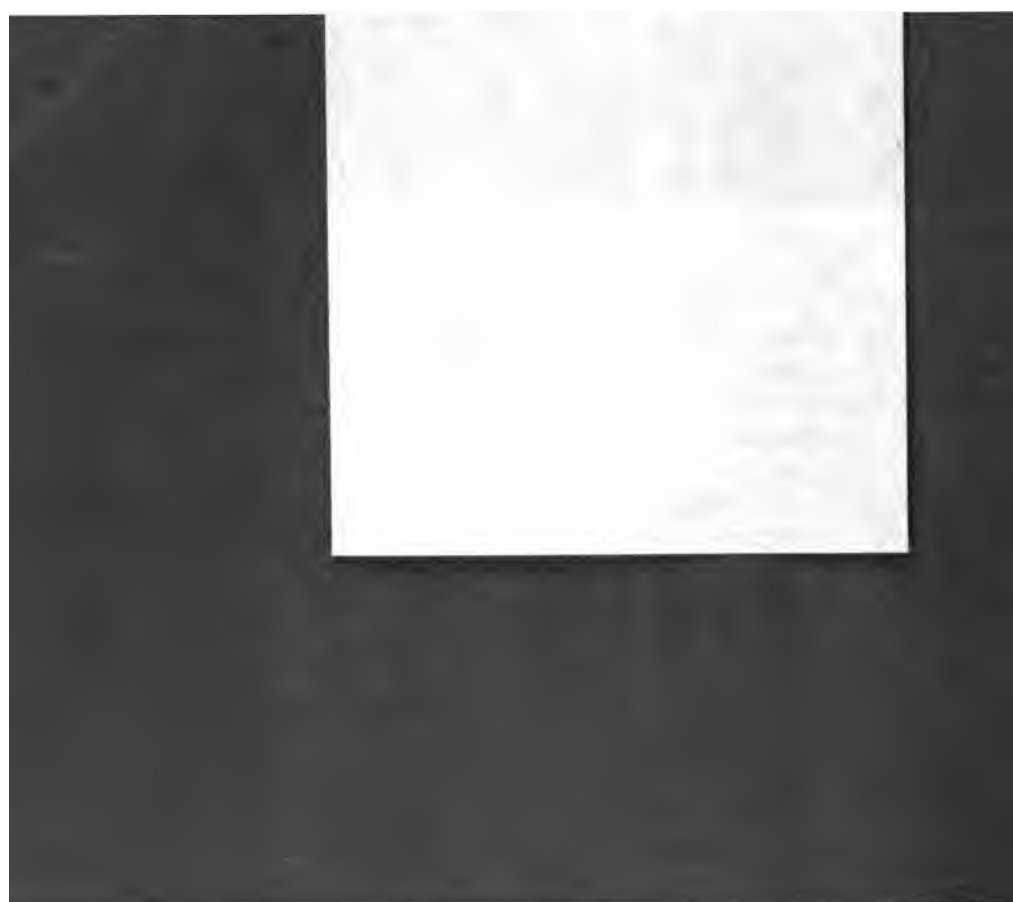
The securing of these exhibitions chiefly depends on the results of the King's Scholarship Examination, and on the results of a practical examination in the actual work of teaching.

An average of four have been awarded annually during the past five years. Nearly all of these exhibitions have been secured by pupil teachers in the service of the Committee and the late School Board, who were out of their apprenticeship, and about to enter a training college.

North Eastern County School, Barnard Castle.—The number of scholarships open to competition from this school is only three—one for Northumberland, one for Durham, and one for Yorkshire; and Newcastle has enjoyed the privilege of holding the scholarship for Northumberland on many occasions.







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